22.6.2020

**OPTIONS, AFTER 10th**

**(ITI AND POLYTECHNICS)**

**AND**

**12TH CLASS**

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**ITI AND POLYTECHNICS**

**LOCATIONS, ADDRESSES, WEBSITES AND PHONE NOS. OF ITI’s**

**COURSES AVAILABLE IN DIFFERENT ITIs**

1. **Carpenter ….. I year, VIII pass,14—40 yrs. (8 institutes)**
2. **Computer operator and Programming assistant …. 1 year (30 institutes)**
3. **Cutting and sewing …. 1 year (46 institutes)**
4. **Draughtsman civil …. 2 years**
5. **Draughtsman mechanical…. 2 years**
6. **Electrician …. 2 years (20 institutes), X pass science, 14-40 years**
7. **Electronic Mechanic.. 2 years, (19 Institute)**
8. **Fitter …. 2 years (13 institutes)**
9. **Foundry Man …. 1 year (2 institute)**
10. **Information technology and Electronics system maintenance … 2 years, (1 institute)**
11. **Health Sanitary Inspector …. 1 year (7 institutes)**
12. **Instrument Mechanic 2 years (8 institutes)**
13. **Craftsman Food Production General …. 1 year (2 institutes)**
14. **Dental lab Technician …. 2 years (2 institutes)**
15. **Desk Top Publishing Operator … 1 year (2 institutes)**
16. **Fashion technology …. 1 year (only one Institute)**
17. **Hair and Skin Care …. I year (4 institutes)**
18. **Library and Information science …. 6 months (2 institutes)**
19. **Mechanist …. 2 years (8 institutes)**
20. **Mechanist Grinder …. 2 years (3 institutes)**
21. **Mechanic Motor Vehicle …. 2 years (14 institutes)**
22. **Mechanic Diesel …. 1 year (3 institutes)**
23. **Mechanic Radio and Television …. 2 years (6 institutes)**
24. **Mechanic Refrigeration and Air Conditioner…. 2 years (17 institutions)**
25. **Mechanic Tractor …. 1 year (5 institutes)**
26. **Moulder …. 1 year (1 institute)**
27. **Painter General …. 2 years (11 institutes)**
28. **Pattern Maker …. 2 years (3 institutes)**
29. **Digital Photographer …. 2 years (2 institutes)**
30. **Plastic Processing Operator …. 1 year (2 institutes)**
31. **Physiotherapy Technician …. 1 year (1 institute)**
32. **Plumber …. 1 year (8 institutes)**
33. **Radiology Technician ….2 years (1 innstitute)**
34. **Secretarial practice …. 1 year (4 institutes)**
35. **Sheet Metal Worker …. 1 year (1 institute)**
36. **Stenography English …. 1 year (18 institutes)**
37. **Stenography Hindi …. 1 year (8 institutes)**
38. **Steward …. 1 year (2 institutes)**
39. **Surveyor …. 2 years (1 institutes)**
40. **Tool and Die Maker Dies and moulds …. 3 years (3 institutes)**
41. **Tool and Die Maker Press Tools Jigs and Fixtures …. 3 years (2 institutes)**
42. **Turner …. 2 years (12 institutes)**
43. **Welder gas Electric …. 1 year (11 institutions)**
44. **Wireman …. 2 years (8 institutes)**
45. **Information Technology and Electronic System Maintenance.**
46. **Production and Manufacturing Sector**

**One year Engineering Trades**

1. **Architectural assistant.**
2. **Auto Electrician.**
3. **Automotive body Repair.**
4. **Computer Hardware and Networking.**
5. **Dent Beating and Spray painting.**
6. **Interior Decorating and Designing.**
7. **Plastic Processing Operator.**
8. **Scooter and Auto-cycle Mechanic.**
9. **Steel Fabricator.**

**One year Non-Engineering Trades**

1. **Baker & confectionaries.**
2. **Commercial Art.**
3. **Craftsman Food Production.**
4. **Digital Photography.**
5. **Dress Designing.**
6. **Dress Making.**
7. **Hospital House Keeping.**
8. **Office Assistant cum Computer operator.**

**POLYTECHNICS IN DELHI**

**Government and Private Polytechnic Colleges (all affiliated to BTE—Board of Technical Education)**

**Central Delhi;**

**1. Delhi Institute of Tool and Engineering** **(Government)**.

**Popularly known as DITE (Best for TOOLS and DIE Engineering)**

**2. Pusa Institute of Technology (Government)**

**3. Sardar Ukil School of Arts.** (**Government**)

**East Delhi;**

**1. Ambedkar Institute of Technology, Geeta Colony, Delhi-31., for Advanced Communication Technology and Research** (**Government**)

**North Delhi**

**1. Aryabhat Institute of Technology (Government),**

**2. Guru Nanak Dev Polytechnic** (**Government**),

**3. Kasturba Polytechnic for women** (**Government**),

**South Delhi**

**1. BSF Polytechnic**

**2. G.B. Panth Institute of Technology (Government)**

**3. Meerabai Institute of Technology (Government)**

**South West Delhi**

**1. Integrated Institute of Technology (Government)**

**2. Rajokri Institute of Technology (Government)**

**Other Government Institutues**

**1. World Class Skill Centre**

**2. Delhi institute of tool engineering**

**3. Bhai Parmanand Institute of Business Studies.**

**Private Polytechnic**

**1. Guru Tegh bahadur Technical Institute.**

**2. Aditya Institute of Technology, New Delhi. (Private)**

**3. Chhutu ram Rural Institute of Technology (Private)**

**4. Subramaniam Bharti College of Science and Technology (Private)**

**5. Delhi Institute of Pharmaceutical Sciences and Research (Private)**

**6. International Polytechnic for women (Private)**

**7. Jamia Hamdard (Private)**

**8. Baba Haridass College of Pharmacy and Technology (Private)**

**Delhi Polytechnics common Entrance Test 2019 for Diploma Programs**

**DTTE (Department of Training and Technical Education) Delhi, announces Common Entrance Test (cet) for Diploma Courses Admission.**

**1. LOCATIONS and PHONE NUMBERS**

**OF GOVT INDUSTRIAL TRAINING INSTITUTIONS, DELHI.**

There are 19 Government ITI including Hastsal Extention Centre and Muti Sectorial Development Plan (for minority women only at ITI Nand Nagri) **having 10281 seats** in 45 different trades affiliated with National Council for Vocational Training (NCVT) and State Council for Vocational Training (SCVT).

1. **Ch. Braham Prakash, Jaffarpur, 011-28012141, 28013519, 25318161,** [itijaffarpur2010@gmail.com](mailto:itijaffarpur2010@gmail.com) **,** [itijaff.delhi@nic.in](mailto:itijaff.delhi@nic.in) **,** <http://itijaffarpur.delhi.gov.in>
2. **Dr. H. J. Bhaba ITI, Khichripur, Mayur Vihar, 011-22753998, 22750621,** [hjbhabhaiti.delhi@yahoo.co.in](mailto:hjbhabhaiti.delhi@yahoo.co.in) **,** [www.hjbhabhaiti.delhi.gov.in](http://www.hjbhabhaiti.delhi.gov.in)
3. **ITI, Malviya Nagar— 011-26687375, 011-26682049,** [itimvnaar@yahoo.co.in](mailto:itimvnaar@yahoo.co.in) **;** [itimn.delhi@gov.in](mailto:itimn.delhi@gov.in)
4. **ITI for women, Nand Nagri, Near DTC Bus Depot, Delhi-93—011-22581299,22134850;** [itinandnagri@yahoo.co.in](mailto:itinandnagri@yahoo.co.in) **;** [www.itinn.delhi.gov.in](http://www.itinn.delhi.gov.in)
5. **Nizam ud din—Arab ki Sarai—011-24359531, 24351667,** [itiaks2011@gmail.com](mailto:itiaks2011@gmail.com)**;** [itiaks.delhi@gov.in](mailto:itiaks.delhi@gov.in)**; website:** [www.itiaks.delhi.gov.in](http://www.itiaks.delhi.gov.in)
6. **ITI, Pusa Campus,—011-25842833, 011-25841477,** [itipusa@hotmail.com](mailto:itipusa@hotmail.com)**;** [itipusa.delhi@gov.in](mailto:itipusa.delhi@gov.in)**; website:** [www.itipusa.delhi.gov.in](http://www.itipusa.delhi.gov.in)
7. **ITI Shadra, Near Metro Station Jhilmil Colony. 011-22150343, 22168727;** [itishahdara.delhi@nic.in](mailto:itishahdara.delhi@nic.in) **;** [www.itishahadra.delhi.gov.in](http://www.itishahadra.delhi.gov.in)
8. **ITI for women (only for women), Tilak Nagar, Near Tilak Nagar Metro Station, 011-25997035, 25995158,** [itiwtn@rediffmail.com](mailto:itiwtn@rediffmail.com) **,** [www.itiwtn.delhi.gov.in](http://www.itiwtn.delhi.gov.in)
9. **Sir CV Raman ITI, Near Burari Crossing, Dheerpur, Delhi-9, 011-27128082, 011-27608082 011-27608083,** [www.scvriti.delhi.gov.in](http://www.scvriti.delhi.gov.in) **;** [iticvraman.delhi@gmail.com](mailto:iticvraman.delhi@gmail.com)
10. **Savitri bai Phule ITI for women, Mori Gate, Gokhle Road, Near Metro Station Kashmiri Gate, (for women). 011-23967449,23929889,** [itimg.delhi@gmail.com](mailto:itimg.delhi@gmail.com) **,** [itimgw.delhi@gov.in](mailto:itimgw.delhi@gov.in) **,** [www.sbpiti.delhi.gov.in](http://www.sbpiti.delhi.gov.in)
11. **Jahangir Puri (K-Block)27637928, 27634888,** [www.itijp.delhi.gov.in](http://www.itijp.delhi.gov.in) **,** [pplitijpuri@gmail.com](mailto:pplitijpuri@gmail.com)
12. **Jail Road. Opposite Tihar Jail, Hari Nagar--28121086, 28122402;** [itijritijr@yahoo.co.in](mailto:itijritijr@yahoo.co.in) **,** [itijr.delhi@gov.in](mailto:itijr.delhi@gov.in) **, www.itijr.delhi.gov.in**
13. **Lala Hans Raj Gupta ITI, DSIDC Industrial Complex, Narela, Delhi-40., about 5 km from Alipur Border, 27781679, 27782076,** [itinarela.delhi@gmail.com](mailto:itinarela.delhi@gmail.com)[www.lhrgiti.delhi.gov.in](http://www.lhrgiti.delhi.gov.in)
14. **Veer Savarkar Basic Training Centre, Pusa Road, New Delhi-12, Near Metro station Rajindra Palace, 011-25842952, 25842762,** [btpusa2007@yahoo.com](mailto:btpusa2007@yahoo.com)**,** [www.vsbtc.delhi.gov.in](http://www.vsbtc.delhi.gov.in) **,** [vsitibtcpusa2007@gmail.com](mailto:vsitibtcpusa2007@gmail.com)
15. **ITI, Vivek Vihar, Near Metro Station Jhilmil Colony, Shahadra (W), 011-22165188, 22150343, 22168727,** [itivivekvihar@gmail.com](mailto:itivivekvihar@gmail.com) **,** [itivvw.delhi@gov.in](mailto:itivvw.delhi@gov.in)[www.vvwiti.delhi.gov.in](http://www.vvwiti.delhi.gov.in)
16. **Extension Centre of ITI, Jail Road, Old Employment Exchange Building, Hastsal, ND-59 (W), 011-28121086, 28122402,** [itijitijr@yahoo.in](mailto:itijitijr@yahoo.in) **,** [www.itijr.delhi.gov.in](http://www.itijr.delhi.gov.in)
17. **ITI Mangole Puri, S- Block, co-ed, Industrial Area, Delhi-83, 011-27918121,27918122,** [itimgadmission2018@gmail.com](mailto:itimgadmission2018@gmail.com) **,** [www.itimanggolpuri.delhi.gov.in](http://www.itimanggolpuri.delhi.gov.in)
18. **ITI For Women (MSDP), ITI Nand Nagri Campus,Delhi-93, 011-22581299, 22134850;** [itinandnagri@yahoo.co.in](mailto:itinandnagri@yahoo.co.in) **;** [www.itinn.delhi.gov.in](http://www.itinn.delhi.gov.in)
19. **Jijabai ITI, August Kranti Marg, Srifort industrial/Institutional Area, Sri Fort, Nearest Metro station Green Park, New Delhi-, Internationally Accredited by APASS, Manila,Philippines., 011-26491842, 26494358,** [itisirifort@yahoo.com](mailto:itisirifort@yahoo.com) **,** [www.jbiti.delhi.in](http://www.jbiti.delhi.in) **,** [itijijabai.delhi@gov.in](mailto:itijijabai.delhi@gov.in)

**Prospectus for admission in government ITI is available on line with**

**Department of Training and Technical Education**

* Muni Maya Ram Marg, Peetampura, Delhi-88, Phone: 011-27321023/24, [caoitiadmission@gmail.com](mailto:caoitiadmission@gmail.com)
* Date of start of on-line registration: first week of June
* Last date of registration: third week of June
* Last date of verification and choice filling: third week of June.
* On-line admission address: <http://www.itidelhiadmissions.nic.com>

**1.1 Other ITI Institutions**

1. Institute of Basic Business Studies of BTC Pusa Campus, ND-110012, 25842952, 25842762
2. Dy. Apprenticeship Advisor, Pusa, 25841665, 25847560
3. Directorate General of Employment and Training- DGE&T; Shram Shakti Bhawan, Rafi Marg, ND-1, 011-23710446 (Director General/Joint Secretary), [www.dget.nic.in/content/#](http://www.dget.nic.in/content/)
4. KI- Industrial Training Institute (ITI), S-107 Badli Industrial Estate Delhi-42, 011-45689759, 47523333, [ksharma@del2.vsnl.net.in](mailto:ksharma@del2.vsnl.net.in), [ks@bluepeterindia.com](mailto:ks@bluepeterindia.com), [www.ki.iti.com](http://www.ki.iti.com)
5. Sri Guru Teg Bahadur ITI, GT Karnal Road, Near Gurudwara Nanak Piao, Delhi-33., 011-27124670, [sgtbimit@hotmail.com/](mailto:sgtbimit@hotmail.com/) , www.sgtbimit.com
6. Sarvodya ITI, 1449/2, Main 100 ft. Road, Durgapuri extension, Shahdara, 011-22800322, [sarvodyainstitute@yahoo.in/](mailto:sarvodyainstitute@yahoo.in/)
7. Sharda ITI, 189, main road, kakrola village, near Bharat ghar, Metro pillar no.860, (between Dwarka and Dwarka Sec-14 metro station) ND-78, 011-65060170, [info@shardainstitute.com/](mailto:info@shardainstitute.com/), [www.shardainstitute.com](http://www.shardainstitute.com)
8. ITI, Pusa road, Karol Bagh, near Institute of Hotel Management, 011-40131003, [itipusand110012@yahoo.com](mailto:itipusand110012@yahoo.com) , [www.delhi.gov.in](http://www.delhi.gov.in)
9. ITI, DSIDC, Industrial complex, delhi-40, 011-27781679, 27782076,
10. ITI, Jaffarpur Kalan, ND-110073,
11. Sabzi Mandi

**1. Industrial Training Institutes (ITI)**

**ITI Courses available in Delhi.**

1. **Carpenter ….. I year, VIII pass,14—40 yrs. (8 institutes)**

* Shadra (vivek vihar),
* Malviya Nagar
* Nizam ud din
* Khichripur
* Nand Nagri
* Pua
* Tilak Nagar
* Subzi Mandi

1. **Computer operator and Programming assistant …. 1 year (30 institutes)**

* Don Bosco, okhla, jamia Nagar, 011-26838121,
* Akshine Industrial Training Centre, 1449/2, 100 feet Road, Durga Puri Shadra
* Baba Saheb Ambedkar Technical Education Society, ITC, Vikas Puri, plot No.13- B.Bodhella Village, Vikaspuri, 011-28532901, 28532959.
* Ch. Brraham Prakash ITI, Jafferpur
* Govt ITI, Khichripur
* ITI Malviya Nagar
* ITI Nand Nagri
* ITI Nizam ud din
* ITI Pusa, ITI Tilak Nagar,
* And many more

1. **Cutting and sewing …. 1 year (46 institutes)**

* Anurag Industrial Training; Arwachin Bharti Bhawan Sen Sec School, C-Block, vivek Vihar
* Asha Sadan Cutting and Tailoring Centre; najaf Garh, ND-43
* Ch. Brahm prakash ITI Jafferpur
* ITI (w) Morigate
* ITI (w) Water Tank; Near Water Tank, Tilak Nagar; 011-25995158, 25997035
* ITI Jahangirpuri
* ITI Khichripur
* ITI Malviya Nagar
* ITI Nand Nagri
* ITI Nizam ud din , Pusa. Shadra, Subzi Mandi,
* Tilak Nagar,
* Many more

1. **Draughtsman civil …. 2 years**

* 17 Institutes

1. **Draughtsman mechanical…. 2 years**

* 11 Institutes

1. **Electrician …. 2 years (20 institutes), X pass science, 14-40 years**

* Don Bosco
* Ch. Brahm Prakash, Jaffarpur
* CRPF Industrial training Centre, CRRF Campus, Wazirabad, north East Delhi-94.
* BABA Sahib ambedkar Technical Education Society, vikaspuri
* Delhi Police Industrial Training Centre, Wazirabad, ND.
* DN Lal Sharda Private Industrial Training Institute, Near Metro Pillar 860, Dwarka Sector-16, ND.
* ITI Jahangirpuri, Khichripur, Malvia Nagar, Nand Nagri, Nizam ud din, Pusa, Shadra, Sabzi Mandi, Tilak Nagar, Narela,
* Many more.

1. **Electronic Mechanic.. 2 years, (19 Institute)**

* Govt Industrial Training Institute(W) Morigate
* ITI Jahangirpuri, Khichripur, Nand Nagri, Nizam ud din, Pusa, Dhadra, Tilak nagar,
* Many more.

1. **Fitter …. 2 years (13 institutes)**

* ITI Nizam ud din, Shadra, jahangirpuri, Khichripur, Malvia Nagar, Nand Nagri, Pusa, shadra, Sabzi Mandi, Tilak Nagar, narela,
* And many more.

1. **Foundry Man …. 1 year (2 institute)**

* Nizam ud din , shadra

1. **Information technology and Electronics system maintenance … 2 years, (1 institute)**

DAV Industrial Training Centre, 5A/15, Main Najafgarh Road, Opposite Police Station, Tilak Nagar

1. **Health Sanitary Inspector …. 1 year (7 institutes)**

* Akashine Industrial Training Centre, 1449/2 Main 100 feet Road, Durgapuri, Shadra.
* Baba sahib Ambedkar Tech Edu Society ITC Vikaspuri
* DAV Industrial Training Centre 5A/15 Main Najafgarh Road, opposite Police Station, Tilak Nagar
* Delhi Institute of Industrial Training Centre, Nangali Poona, ND
* MRS Industrial Training Centre, Khadipur, Village Khadipur
* National Industrial Training Centre, Najafgarh, 30-34 Sewak Nagar, Uttam nagar, Najafgarh, 011-25343737, 011-65473376
* Sarvodya Industrial training Centre, 1449/2, durgapuri, shadra

1. **Instrument Mechanic 2 years (8 institutes)**

* Don Bosco
* ITI Khiripur, Malviya Nagar, Nand Nagri, Nizam ud din, Pusa, Shadra, Subzi Mandi

1. **Craftsman Food Production General …. 1 year (2 institutes)**

* Cradle Industrial Training Centre, 988/2 Mansa Enclave, New Oberoi Farm, Kapashera, South West Delhi
* Gouri Food Craft Industrial Training Centre, Plot No. 456- Near Hanuman Mandir, Bharthal Bihwasan, ND-110037, 011-64643111, 64736222

1. **Dental lab Technician …. 2 years (2 institutes)**

* Baba sahib Ambedkar Technical Education Society ITC Vikaspuri, Plot No. 13-B Bodhella Village, Vikaspuri ND-18, 011-28532901, 011-28532959
* ITI Narela

1. **Desk Top Publishing Operator … 1 year (2 institutes)**

* NSIC Technology Service Centre, Okhla ndustrial Estate,Phase II, Okhla ND-20, 011-26921562, 011-24522789
* Veer Savarkar Basic Training Centre

1. **Fashion technology …. 1 year (only one Institute)**

* Veer Savarkar Basic Training Centre, Pusa, 011-25842952, 011-25842762.

1. **Hair and Skin Care …. I year (4 institutes)**

* ITI (W) Morigate
* ITI (W) Water Tank
* Jijabai Training Institute for Women, August Karanti Marg, Srifort, Near Srifort Auditorium, Khel gaon Marg, ND-49, 011-26491842, 011-26494358
* Sampuna Industrial Traing Centre, Amar Jyoti Colony, Bawana Road, ND-85

1. **Library and Information science …. 6 months (2 institutes)**

* Delhi Institute of Industrial Training Centre, Nangali Poona, ND
* National Industrial training Centre, Najafgarh,, 30-34 Sewak Nagar, Uttam Nagar,Najafgarh,ND-59., 011-25343737, 011-65473376

1. **Mechanist …. 2 years (8 institutes)**

* ITI Jahangirpuri, Malviya Nagar, NandNagri, Nizam ud din, Pusa, Shadra, Tilak Nagar,
* NSIC Technical centre, Okhla Industrial Estate phase III, okhla, 011-26921562, 011-24522789

1. **Mechanist Grinder …. 2 years (3 institutes)**

* Don Bosco
* ITI Nizam ud din, Shadra

1. **Mechanic Motor Vehicle …. 2 years (14 institutes)**

* ITI Jahangirpuri, khichripur, Nand Nagri, nizam ud din, Pusa, Shadra, Subzi Mandi, Tilak Nagar,
* Don Bosco
* CRPF Industrial Training Centre, CRPF campus, Wazirabad,
* Delhi Police Industrial Training Centre, Wazirabad, ND
* And others

1. **Mechanic Diesel …. 1 year (3 institutes)**

* ITI Nizam ud din, Pusa and Shadra

1. **Mechanic Radio and Television …. 2 years (6 institutes)**

* ITI Nizam ud din, Pusa, Shadra,Subzi Mandi,
* Sri Guru Tegh Bahadur Industrial Training Centre,
* CRPF Industrial Training Centre.

1. **Mechanic Refrigeration and Air Conditioner…. 2 years (17 institutions)**

* Don Bosco
* Baba Saheb Ambedkar, Vikaspuri
* Ch. Brahm Prakash ITI Jafferpur, 011-250 12141, 011-250 25 177
* CRPF NDUSTRIAL Training Centre
* Delhi Police Industrial Training Centre
* ITI Khichripur, Malviya Nagag, Nand Nagri, Nizam ud din, Pusa, Shadra, Sabzi Mandi, Tilak Nagar, Narela,
* Sri Guru Tegh Bahadur Industrial training Centre

1. **Mechanic Tractor …. 1 year (5 institutes)**

* ITI Jahagirpuri, Nizam ud din, Pusa, Shadra, Narela,

1. **Moulder …. 1 year (1 institute)**

* ITI Pusa

1. **Painter General …. 2 years (11 institutes)**

* Ch. Brahm Prakash, Jafferpur 011-25012141, 011-25025177
* ITI Jahangirpuri, Khichripur, Malviya Nagar, Nand Nagri, Nizam ud din, Pusa, Shadra, Subzi Mandi,Tilak Nagar, Narela.

1. **Pattern Maker …. 2 years (3 institutes)**

* ITI Nizam ud din, Pusa, Shadra

1. **Digital Photographer …. 2 years (2 institutes)**

* ITI Jahangirpuri
* Multipurpose Training Centre for Deaf Industrial Training Centre, 12 and 13, Special Institutional Area, Shaheed Jeet Singh Marg, Near JNU, South Delhi-67

1. **Plastic Processing Operator …. 1 year (2 institutes)**

* ITI Khichripur, Pusa.

1. **Physiotherapy Technician …. 1 year (1 institute)**

* ITI Najafgarh

1. **Plumber …. 1 year (8 institutes)**

* Ch. Braham Prakash ITI Jafferpur
* ITI Jahangirpuri, ITI Khichripur, Nand Nagri, Nizamuddin, Shadra, Tilak Nagar, Narela

1. **Radiology Technician ….2 years (1 innstitute)**

* ITI Njafgarh

1. **Secretarial practice …. 1 year (4 institutes)**

* ITI Nand Nagri,
* Jijabai ITI for Women
* Swami Sivanand Memorial Institute of Fine Arts and Craft, Road No.31, East Avenue, Punjabi Bagh NS-26, 01125103555

1. **Sheet Metal Worker …. 1 year (1 institute)**

* ITI Pusa

1. **Stenography English …. 1 year (18 institutes)**

* Ch. Braham Prakash ITI Jafferpur
* ITI (W) Morigate
* ITI (W) Water Tank
* Jijabai ITI (W)
* NDMC (W) Technical Institute
* ITI Jahangirpuri, Malviya nagar, Nizamuddin, Pusa, Shadra, Subzi Mandi, Tilak nagar,
* Sri Guru Teg Bahadur IT Centre
* Lala Hansraj Gupta ITI Narela
* Sulabh International Training Centre, RZ-83, Sulabh Bhawan, Mahavir Enclave, West Delhi- 45

1. **Stenography Hindi …. 1 year (8 institutes)**

* Ch. Brahm Pakash, ITI Khichripur,ITI Nizamuddin, pusa, Shadra, Jijabai,
* NDMC (W)
* Swami Sivanand Mwmorial Institute of Fine Arts and Crafts.

1. **Steward …. 1 year (2 institutes)**

* Cradle Industrial Training Centre, 988/2 Mansa Enclave, Near Oberoi Farm, Kapashera, South West Delhi-37.
* Craftsman Food Production General, 10th pass, 14-40 years

1. **Surveyor …. 2 years (1 institutes)**

* ITI Pusa

1. **Tool and Die Maker Dies and moulds …. 3 years (3 institutes)**

* ITI Nizamuddin, Pusa, Shadra

1. **Tool and Die Maker Press Tools Jigs and Fixtures …. 3 years (2 institutes)**

* ITI Nand Nagri, Subzi Mandi,

1. **Turner …. 2 years (12 institutes)**

* Don Bosco
* ITI Jahangirpuri, Khichripur, Malviya Nagar, Nand Nagri, Nizmuddin, Pusa, Shadra,Subzi Mandi, Tilak Nagar, Narla,
* NSCI Technology Service Centre, Okhla Industrial Estate Phase III, Okhla, 011-26921562, 011-24522789

1. **Welder gas Electric …. 1 year (11 institutions)**

* CRPF Industrial Training Centre
* Delhi Police Industrial Training Centre
* ITI Jahangirpuri, Malviya Nagar, Nand Nagri, Nizamuddin, Pusa, Shadra, Subzi Mandi, Tilak Nagar,Narela.

1. **Wireman …. 2 years (8 institutes)**

* ITI Khichripur,Malviya Nagar, Nand Nagri, Nizamuddin, Pusa, shadra, Subbzi Mandi, Narela.

1. **Information Technology and Electronic System Maintenance.**
2. **Production and Manufacturing Sector**

**One year Engineering Trades**

1. **Architectural assistant.**
2. **Auto Electrician.**
3. **Automotive body Repair.**
4. **Computer Hardware and Networking.**
5. **Dent Beating and Spray painting.**
6. **Interior Decorating and Designing.**
7. **Plastic Processing Operator.**
8. **Scooter and Auto-cycle Mechanic.**
9. **Steel Fabricator.**

**One year Non-Engineering Trades**

1. **Baker & confectionaries.**
2. **Commercial Art.**
3. **Craftsman Food Production.**
4. **Digital Photography.**
5. **Dress Designing.**
6. **Dress Making.**
7. **Hospital House Keeping.**
8. **Office Assistant cum Computer operator**
9. **College for Fire Safety Management**

**100% Job Oriented Training**

**Enquiry: 09871549659**

**POLYTECHNICS IN DELHI**

**POLYTECHNICS IN DELHI**

There are dozens of Polytechnic colleges in Delhi. Most of them are the best Polytechnics in India. List of Government Polytechnic and some good private Colleges is given below.

**Government and Private Polytechnic Colleges (all affiliated to BTE—Board of Technical Education)**

**Central Delhi;**

**(I) Delhi Institute of Tool and Engineering** **(Government)**.

**Popularly known as DITE (Best for TOOLS and DIE Engineering)**

**Address:**

* Wazirpur Indutrial Area, New Delhi (011-27006130,2700612927372618)
* Maa Anandmayi Marg(near DJB Watertank)

Block-A, okhla industrial area, PhaseII,ND-20, (011-26388920, 29207304)

**Official website:**

http;//www.dite.delhi

**Courses;**

1. **M**.**Tech** –3year course-- (qualification req: BBA, BCA, B.Sc, B.Com, B.A. with 50% marks or PG in any subject with math as a sub in sen.secondary with) admission through GATE, JEE
2. **B**.**Tech**, Tool Engineering
3. **B.Tech**, Mechatronics (10+2, through JEE rank) (10+2, through JEE rank)
4. **Diploma :** Tools and Die making
5. **Diploma :** Mechanical Engineering
6. **Two years** Certificate course
7. **One year** Condensed course

**(II) Pusa Institute of Technology (Government):** Pusa Institute of Technology formerly known as Posa Polytechnic is a Premier Engineering College in New Delhi, established in 1962. It is affiliated to Board of Technical Education (BTE)

1. **Automobile Engineering—**62 seats—Full Time and Part time
2. **Civil Engineering—**62+48—Full time
3. **Civil Engineering with specialization in Construction Engineering—**62 seats—Full time
4. **Electrical Engineering—**62+48 seats—Full time
5. **Electronics and Communication Engineering—**60 seats—full time
6. **Printing Technology—**62+48 seats—Full time
7. **Automobile Engineering—**60 seats—Part time

**(III) Sardar Ukil School of Arts.** (**Government**)

**East Delhi;**

1. **Ambedkar Institute of Technology, Geeta Colony, Delhi-31., for Advanced Communication Technology and Research,** 011-21210161 (**Government**)

**North Delhi**

1. **Aryabhat Institute of Technology (Government),**

**Address:** GT Karnal Road, Near Shakti Nagar, Ashok Vihar, Bilaspur, ND-33,

**Phone No.** 011-27426263

1. **Guru Nanak Dev Polytechnic** (**Government**),

**Address:** B**-**10 Main Road Shivalik, Malviya Nagar, ND-17,

**Phone No.** 011- 65700507.

1. **Kasturba Polytechnic for women** (**Government**),

**Address:** Muni Maya Ram Jain Marg, PremBari Pul, near TV Tower, Pitampura. **Phone No.** 011-27325252,

**Website:**  [kpedu@bol.net.in](mailto:kpedu@bol.net.in)

It was established in 1986 to encourage women to effectively contribute towards economic development. It is housed in a plot area f 37,067.95 squire meter of land. Consists of Academic complex, Hostel Block, Residential Complex, play round and parking area. It offers full time Diploma Course in Hi-tech and emerging areas of technology. It is under the Department of Training and Technical Education. It was originally set up in 1986-87 with the approval of All India Council for technical Education (AICTE) as a guest institute in the

Meerabai Polytechnic Campus at Maharani Baugh. It got the best Polytechnic award in Northern India in 2003 by TTTI, Chandigarh. The Institute seeks to place each of its students in an organization/company of great repute.

**Available Courses:**

1. **Medical Electronics:** seats 15,
2. **Diploma in Public Health and environmental Engineering:** seats 30
3. **Diploma in fashion Design:** seats 40
4. **Diploma In computer Engineering:** seats 45
5. **Diploma in Digital Electronics & Microprocessor Based system designs:** seats-15.

**South Delhi**

**(I) BSF Polytechnic**

**(II) G.B. Panth Institute of Technology (Government)**

**(III) Meerabai Institute of Technology (Government)**

**South West Delhi**

1. **Integrated Institute of Technology (Government)**
2. **Rajokri Institute of Technology (Government)**

**Other Government Institutues**

1. **World Class Skill Centre**
2. **Delhi institute of tool engineering**
3. **Bhai Parmanand Institute of Business Studies.**

**Private Polytechnic**

1. **Guru Tegh bahadur Technical Institute.**
2. **Aditya Institute of Technology, New Delhi. (Private)**
3. **Chhutu ram Rural Institute of Technology (Private)**
4. **Subramaniam Bharti College of Science and Technology (Private)**
5. **Delhi Institute of Pharmaceutical Sciences and Research (Private)**
6. **International Polytechnic for women (Private)**
7. **Jamia Hamdard (Private)**
8. **Baba Haridass College of Pharmacy and Technology (Private)**

**Delhi Polytechnics common Entrance Test 2019 for Diploma Programs**

**DTTE (Department of Training and Technical Education) Delhi, announces Common Entrance Test (cet) for Diploma Courses Admission.**

* Centres for exams will be announced later.
* Apply on line
* Forms available: 01-4-2019 to 30-4-19 till 5 P.M.
* Last date for submission 30-4-2019
* Total number of seats 772
* 12th of 10+2 Vocational Engineering stream/ITI pass outs from outside Delhi are not eligible for admission against the above seats.
* Sate Delhi CET exam—08th and 09th June.
* Only Indian Nationals/ Sponsored candidates are eligible to seek admission.

**SELECTON OF STREAM**

**AT CLASS 11TH, And UG LEVEL**

**1. HUMANITIES,**

**2. COMMERCE**

**3. SCIENCE**

**SELECTON OF STREAM AFTER CLASS 10TH**

**Choosing the stream after passing class 10th is a deciding factor for one’s future course of studies. It requires total dedication and concentration in studies from class 9th. Interest and capabilities of individual student in class 9th and 10th determine the selection stream in class 12th**

**HUMANITIES**

**Definition:**

Defining Humanities is a difficult task. However, it can be said in a few words that it is an academic discipline which deals with the study of ‘Human Condition’, utilizing methodologies that are usually analytical, critical or speculative.

**Employability and the skill quotient**

What one needs is a will to succeed, a perennial source of energy and unrelenting dynamism.

**It is important to be skilled, but what is equally important is to be employable.**

* One of the key requirements is a global mind set, which is about thinking big, thinking on a scale beyond what we are used to, thinking worldwide. When one is working in a global marketplace, a global mindset is indispensable. This can be achieved by developing capabilities to scan the world from broad perspective, an esthetic openness towards divergent ideas and experiences.
* Greater tolerance of other people and culture. It is important to build the capacity to rethink boundaries, to consider diversity an asset and to view uncertainty as an invigorating and natural part of the business, rather than being threatened by it.

A talent mixed with expertise in areas spanning from technology, domain (industry), business-practices usually is required by an agency for its need based employment.

The right combination of consistent good academic scores, sound knowledge of subject fundamentals, good communication and interpersonal skills can pave the way for a rewarding career.

It is important to develop behavioral skills, communication and presentation skills, dynamics, and business etiquettes, cross cultural adaptability and so on. Continuous learning, flexibility and a “can do” attitude are clear plus points in today’s environment.

**Positive attitude**

Employers love to employ those UGs/ PGS who may not have acquired niche skills, but has a positive attitude towards learning.

**1. HUMANITIES**

**Definition:**

Defining Humanities is a difficult task. However, it can be said in a few words that it is an academic discipline which deals with the study of ‘Human Condition’, utilizing methodologies that are usually analytical, critical or speculative.

**Why studying a Bachelor’s in Humanities**

* The Humanities are academic disciplines that seek to understand and interpret the human experience, from individuals to entire cultures, engaging in discovery, preservation and communication of past and present record to enable a deeper understanding of contemporary society.
* The humanities encompass literature, classics, ancient and modern languages, history, philosophy, media studies, the fine and performing arts, and other related subjects.
* It can be a challenge to show the benefits the Humanities bring. The Humanities are about what it is to be human.
* They foster social justice and equality and reveal how people have tried to make moral, spiritual and intellectual sense of the world.
* They teach empathy.
* They teach us weigh evidence skeptically and consider more than one sideof every question.
* The Humanities encourage us to think creatively.
* They teach us reason about being human and to ask questions about our world.
* The Humanities develop informed and critical citizens.
* Without the Humanities democracy will not flourish.
* The value of Humanities is more often in the questions posed than the answers found.
* Humanistic study is not formulaic.
* One only needs to turn on the news to see that we need the skills and knowledge of the Humanities in understanding other cultures, being able to communicate effectively realizing the ramifications of history and analyzing human behavior.
* Over two third of Humanities and social science graduates enter the private sector, primarily the financial and business sectors, followed by wholesaling and retailing. These sectors represent some of the fastest growing areas within the economy.
* Humanities students build skills in writing and critical reading.
* Arts indeed is a very diverse field and the students belonging to this discipline can make their career in a variety of fields including law, journalism, fashion designing, marketing, and aviation beside other courses.
* Humanities are wide field of study with extremely interesting and mind stimulating career galore.
* Wide range of subjects that come under the umbrella term Humanities range from history, languages, literature, law , philosophy, religion, performing arts, anthropology, communication, sociology, psychology and many more.
* Choosing the Humanities stream after class10 would enable a student to choose a career from a range spanning a wide area.
* Social science is a field of academics that deals with a scientific study of the human society. It is a broad category encompassing several disciplines that cannot be studied under three natural science such as archeology, anthropology, geography, economics, history, psychology, political science, linguistics etc.
* On average Humanities graduates have a comparable employment rate to graduates with other degrees.
* It offers a host of opportunities in various fields. Like mass-com, counseling and teaching. The main subjects opted by most CBSE class 12th Arts students are History, Pol. Sc., Sociology, Economics, Geography and Psychology etc.
* To produce committed, value-based and intellectual approach that contributes to the advancement of academics and the fields related to the practical life

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  29. **ADMINISTRATION AND MANAGEMENT**

**(BBA, MBA and further studies in India and abroad)**

* 1. **GRADUATION AND POST GRADUATION IN**

**STUDENTS’ WELFARE (JMI)**

* 1. **UG AND PG IN HEALTH CARE AND GYM**
  2. **B.A. IN SCRIPT WRITING**

**1.1 ENGLISH**

**Introduction**

An **English literature degree** can open a number of doors once you have graduated. A strong degree from a good University is an asset to have. Not only being a great thing for employers and job prospects but also allowing access to excellent postgraduate schemes or conversation courses.

**Eligibility**

10+2 in any stream

**Courses**

BA English (Hons), PG and Research

**1.2 HISTORY**

**Introduction**

* History is a chronological study of human past. It deals with research that is directed towards examining and analyzing a particular sequence of events.
* Studying history enables humans to gain better knowledge of their cultural origins. One can study the history of anything in the world for the simple reason that everything has a history and its history has influenced its current condition in several ways.
* Studying history not only enables us to analyze and study the discipline as an end in itself but also to use the subject as a means to providing preservative and a better understanding on the problems of present.
* History helps us not only to understand change and how the society we live in came to be.
* History can also be studied as an art and serves the purpose of entertainment on aesthetic grounds but also on the level of human understanding.

**Eligibility**

10+2

**Courses**

BA Hons., MA, Ph.D.

**Scope for higher studies after BA History**

A few of the areas of specialization available are;

* Agrarian Economy of Ancient, Medieval and Modern India
* American Imperialism in 19th and 20th century
* Ancient and Medieval Societies

Anyone out of History of USA or china and Japan or Canada

* British policies and princely states
* Buddhism in India
* Dalit movement in modern India
* There are so many other specialization courses in specialization in MA and other certificate courses after BA

**Career opportunities**

* Teacher after doing B.Ed or can become a lecturer after M.Phil or Ph. D
* Archivist
* Information Manager
* Librarian
* Politician
* Public Relation Officer
* Record Managers
* Probationary officer or clerks in Banks
* Work in newspaper or magazines

**Avenue of** **study of History at higher level,**

* study of historiography (study of the methods of historians in developing history as an academic discipline)
* historical research methods, study of specific periods

**Main specializations**

* Archaeology
* Museology: the science or practice of organizing, arranging and managing museums.
* Archival studies. Most of these courses are offered at PG level. Students specialize in particular object of study and become experts in coin (numismatist), weapon sculpture, deciphering of inscriptions (epigraphist*).*

**Employment:**

* Archaeologists employed by ASI for about 3600 monuments, museums Research institutes.

**1.3 POLITICAL SCIENCE**

**1.4 ECONOMICS**

**1.5 GEOGRAPHY**

**1.6 SOCIOLOGY**

**Employment Areas**

* Corporate Research Firms
* Communication Industries
* Criminal Justice Field
* Educational Institutions
* Labour Unions
* Prisons
* Social Work Department
* Trade Association
* Social Worker
* Marriage Counselor etc.

**1.7 URDU**

**1.8 HINDI**

**1.9 Sanskirt**

**1.10 Civics**

**1.11 PHYSICAL EDUCATION**

**Institutions/colleges/universities**

* National Institute of sports, Patiala
* Indira Gandhi Institute of Physical Education and Sports Science, New Delhi
* Lakshmi National Institute Physical Education, Gwalior

**Job options**

* Physical education Teacher
* Sports Coach
* Nutrition specialist
* Recreation Centre Director
* Rehabilitation Specialist
* Physical therapist
* School Gym Teacher
  1. **DRAWING AND PAINTING**

**1.13 FOREIGN LANGUAGE**

**Introduction**

* Foreign languages give a competitive edge in career choice
* One is able to communicate in the second language.
* Foreign language study enhances listening skills and memory.
* Improves the knowledge of one’s own language,

**Eligibility**

* 10+2 plus one year bridge programme and then must pass the assessment test in the respective languages.
* Students who have completed two years study are eligible for UG.
* An eligibility criterion is to be followed for admission in UG courses for different languages.

**Courses (languages)**

* German
* French
* Arabic
  1. **FINE ARTS**
  2. **HOME SCIENCE**

**Specialization**

There are five major components or areas of specialization in Home Science

* Food and Resource
* Fabric and Human Communication
* Nutrition Management
* Apparel Science Development, and
* Extension Today

Home Science is so advanced that each specialization is a domain in its own with its areas of specialization and Vocational/professional opportunities. Some of the areas of further specialization are as follows.

**Main Branch**

**Food and nutrition**

* Food science
* Clinical and community nutrition
* Institutional food service

**Home Science in daily life**

* Fabric and Apparel
* Clothing construction science
* Textile Science
* Textile designing
* Garment designing
* Care and maintenance of clothes
* resource management
* interior decoration
* consumer Education
* child welfare
* Adolescent marriage and family guidance
* Care of the elderly
* Care of special children
* Programmed planning and evaluation
* Training and capacity building
* Management of community service organization

**1.16 MULTIMEDIA AND WEB TECHNOLOGY**

**Introduction**

CBSE has introduced vocational subjects on multimedia and technology to enhance the students’ knowledge in latest technologies and trends lik, HTML, DHTML, XML, CSS, JAVA script. VB script, ASP, Photoshop, Coral draw etc. it not only increases the IT awareness but also gives the job opportunities in this field.

This course will definitely help those students who will select computer stream during their graduation after passing 10+2

Web designing courses have been gaining popularity as data visibility on the internet has become an important aspect of digitization.

There is a huge demand for designers in the market and pursuing web designing course can enhance the job prospects of candidates.

Multimedia technology includes interactive computer-based applications that allow people to communicate ideas and information with digital and print lements. Professionals in this field use computer software to develop and manage online graphics and contents.

The work that media technology specialists produce is used in various mrdia, such as training program, web pages and news sites.

**Courses**

1. B.Sc. in multimedia—Degree course-3 year
2. Diploma in web designing—2 year diploma
3. Diploma in web designing and software development—2 year diploma
4. Certificate in internet and web designing—18 month to 2 year certificate course
5. Post-graduate diploma in web designing
6. M.Sc. In E-commerce and web designing

**Institutions/colleges/universities**

1. Indian School of Business and finance, New Delhi (2) Jagran Lakecity University,

Bhopal,

**1.17 PHILOSOPHY**

**Introduction**

Philosophy uses the tool of logic and reason to analyse the ways in which humans experience the world’ it teaches critical thinking, close reading, clear writing, and logical analyses. It uses these to understand the language we use to describe the world., and our place within.

Philosophy comes from a *Greek* word meaning “love of wisdom”

**Institutions/colleges/universities**

* 1. **PSYCHOLOGY**

**Introduction**

* Psychology is the scientific study of mind and behavior. It is a multifaceted discipline and includes many sub fields of study such areas as human development, sports, health, clinical and social behavior and cognitive processes.
* Its origin can be traced back to ancient Greece, 400—500 years BC.
* The emphasis was a philosophical one, with great thinkers such as Socrates influencing Plato, who in tern influenced Aristotle.
* Philosophers used to discussed many topics now studied in modern Psychology, such as memory, free will, attraction etc.
* Wundt, an American Psychologist separated psychology from philosophy by analyzing the working of the mind using more objective and standardized procedures.
* Psychology is a science which attempts to investigate the causes of behavior using systematic and objective procedures for observation, measurement and analysis, backed-up by theoretical interpretations, generalizations, explanations and predictions.
* This course offers students an engaging introduction to the essential topics in psychology.
* Throughout this study of human behavior and mind, the student will gain insight into the history of the field of the psychology, as well explore current theories and issues in areas such as cognition, motivation and wellness.

**Career in Psychology**

* **Psychiatrist:** must first earn a Bachelor’s degree, then complete a Medical degree. Psychiatrists are Medical doctors who specialize in diagnosing and treating mental illness and disorders.
* **Industrial-organizational Psychologist:** most professionals in this field hold a doctorate in industrial organizational psychology, and job opportunities and salaries are more abundant for those who have completed this level of education. However there are some jobs are available to those who hold a Master’s degree.
* **Neuropsychologist:** Education required, Doctorate degree in neuropsychology or clinical neuropsychology
* **Engineering Psychologist:** There are some early-level jobs available to psychologists with master’s degree, but those with doctorate degree will have a much easier time finding jobs and will earn higher salaries.
* **Psychology teacher:** post secondary psychology teachers must have earned a master’s degree or doctoral degree. High school psychology teachers need at least a bachelor’s degree.
* **Clinical Psychologist**
* **School counselor:** for those who prefer teaching or working in the educational setting, educational psychology, and school psychology and school counseling are the options to choose from. These positions are concerned on the overall mental welfare of the school’s employees and students.

**Duties of school counselor**

1. Help students understand and overcome social or behavioral problems through individual or group counseling
2. Provide individual and small group counseling based students’ need.
3. Work with students to develop skills, such as organization, time management and effective study habits.
4. Help students set realistic academic and career goals and develop a plan to achieve them.
5. Evaluate students’ abilities and interests through aptitude assisments, interviews and individual planning.
6. Collaborate with teachers, administrators, and parents to help students succeed.
7. Deliver classroom guidance lessons on topics, such as bullying, drug abuse and planning for college or careers after 10th and then graduation.
8. Identify and report possible cases of neglect or abuse.
9. Refer students and parents to resources outside the school for additional support.
10. The specific duties of school counselors vary with the ages of students they work with.

* **Career counseling:**

1. Career counselors are usually employed in academic settings, aiding students in building future educational or career paths.
2. Career counselors assist people with the process of making career decisions, by helping them choose a career or educational program.
3. Career counselors work with clients at various stages in their careers.
4. Some work in colleges to help students choose a major career. They also help students determine what jobs they are qualified for with their degrees.
5. These counselors also work with people who have already entered the work force.
6. Career counselors develop plans to improve their client’s current career and provide advice about entering a new profession.
7. Some career counselors work in private practice.

* **Sports psychologist:** the sports’ psychologist is concerned on the effects of physical activity to the psychological health and performance of athletes. These psychologists work on the academic level and serve as consultants for sports teams. Sports psychologists work along with training coaches in developing rehabilitation and team building programs. They also provide counseling to athletes who undergo career transitions.
* **Marriage and family therapis**t: a popular career in the clinical setting is becoming a marriage and family therapist (MFT). This requires masters in science or arts and thousands of intern hours. They occasionally work in hospital settings besides psychiatrists and social workers, while other times in their own private practices. The focus is facilitating behavioral changes in the marriage and the family sphere.
* **Counseling Psychology:**
* it is a type of applied psychology that can be used to help people gain control of their feelings.
* It focuses on treating individuals with a variety of different emotional, t
* Counseling psychology is one of the most common and widespread psychological specialties.
  1. **RELIGION**
  2. **SPORTS MANAGEMENT**

**Introduction**

Bachelor of Sports Management (BSM) syllabus consists of topics such as Basic Statistics, contemporary issues in Sports, Ethics of Sports, Financial Accounting, Principles of leadership in Sports, Marketing Management, Advertising, Public relations and sponsorship of sports and much more.

**1.21 THEATRE**

**Introduction**

* Drama and theatre studies is an intellectually challenging and artistically rewarding subject
* The course is designed to instill a thorough understanding of both theory and practice and has plenty of scope for development-based skills.
* As the student of Drama and Theatre studies course, you will be expected to see as much live theatre as possible and to actively explore new ideas and forms of performance.

**Courses**

BA, MA in theatre and TV

**Institutions/Colleges/Universities**

* National School of Drama, Bahawalpur House, Mandi house, New Delhi, DU.
* Lovely Professional University (admission office—connaught place)
* ICE Balaji Tele Films—Institute of Creative Excellence, Mumbai
* Asian Academy of Films and Television.

**1.22 HUMAN RESOURCE DEVELOPMENT, (IMI, IGNOU)**

**Introduction**

* Human resource Development (HRD) can be defined as a set of systematic and Planned activities designed by an organization to provide its members with opportunities to learn necessary skills to meet current and future job requirements.
* Learning is the fundamental principle that drives organizations towards higher concentration on Human Resource Development.
* HRD activities should begin when an employee joins an organization and continue throughout his career, irrespective of the authority level that the person holds.
* Companies require their human resource management professionals to possess a bachelor’s degree or even a Master’s degree particularly for senior-level leaders like HR directors and labor Relations Managers.
* It is very rare to find an entry-level job in the HR field without at least a bachelor’s degree.

**Eligibility**

* 10+2 in any stream

**Courses**

Bachelor’s degree in human resources or human resource management may be designed as;

* Bachelor of Science (BS)
* Bachelor of Arts (BA)
* Bachelor of Business Administration (BBA)
* BS/BA degree programs are most often designed as
* BA/BS in Human Resource Management
* BS/BA in Management with a concentration in Human resources.

Because of the business focus of most human resources degree programs, Bachelor’s degrees are often designed as;

* BBA wit concentration inhuman Resources.
* BBsA with a concentration in Organizational Behavior.
* BBA with concentration in Industrial Relations.
* BBA with a concentration in Management and Leadership.

Bachelor’s degree programs are designed to prepare students for entry-level positions in any number of HR areas, such as;

* Employment and Recruitment ‘
* Training and Development.
* Compensations and benefits.
* Employee and Community Relations.
* Personnel records.
* Health and safety strategic planning.

**Institutions/Colleges**

(IMI, IGNOU)

**Master’s Degree programs in Human Resources**

Organizations are now seeking highly skilled HR professionals who can take an active role in building the strategic vision of an organization. Therefore Master’s degrees in human Resources are more popular than ever.

**1.23 BACHELOR OF MASS COMMUNICATION (BMC)**

**Introduction**

Mass communication is the process of disseminating information through a medium to a large and diverse audience. BMC course is a form of public communication, where the message or information is transmitted electronically or mechanically. Mass communication is made up of branches like PR, Journalism, advertising and mass media. Now a days Journalism and mass Communication is a very well known course combination.

**Eligibility**

**Admission Procedure**

Admission procedure has two rounds

**First round**

Students will have to appear for the entrance test conducted by various institutes. This exam is a common objective and written test which is held in several cities across India. students will be short listed for second round on the basis of their entrance test score.

**Second Round**

If they successes in getting short listed, they will have to be present at the centre for the duration of 3-4 hours for the same. In this round they will have to a written ability test, they have certain documents verified and participate in a studio test as well as a personal interaction

**Institutions/colleges**

* JMI and other Institutes in India
  1. **BACHELOR IN JOURNALISM (B.J--3 years)**

**Introduction**

It is an undergraduate Mass Communication course. Journalism is concerned with collection and dissemination of news through the print media and electronic media. The candidate is required highly developed skills in language, a good knowledge about media, an interest in current affairs and a broad general knowledge. Students can incorporate specialization in the areas of television, journalism, health reporting, IT reporting, business and finance reporting, crime reporting, sports reporting or foreign correspondent.

**Eligibility**

10+2 in any stream

**Course**

BA Journalism

**Institutions/colleges/universities**

Makhanlal Chaturvedi National University of Journalism, Bhopal

* 1. **BACHELOR OF MASS MEDIA (BMM)**

**Introduction**

**Eligibility**

10+2 in any stream, percentage requirement may vary from institution to institution.

Some institutes also conduct entrance examination.

**Courses**

Bachelor of Mass Media

**Institutions/Colleges/Universities**

**Employment areas**

* All India Radio
* Central Information Service
* News papers
* Periodicals and magazines
* Press Information Bureau
* TV Channels
* Websites etc.

**Job types**

* Columnist
* Correspondent
* Editor
* Freelance writer
* Journalist
* News Analyst
* Photo Journalist
* Reporter etc.
  1. **JEWELRY DESIGN COURSES**

**What is a Jewellery design**

Jewellery design is a field wherein professionals design as well as create jewellery. The entire process of making a jewellery is quite complex and requires technical expertise. Before any jewellery piece is created, a design for it is conceptualized through a detailed drawing which is made by a jewellery designer.

A jewellary designer is a person who is trained in such a way that he/she has an architectural as well as well as functional knowledge of different materials, compositions, fabrication techniques, wearable as well as the market tends.

**Eligibility**

10+2 in any stream for admission at UG level

For admission at PG level graduate is the requirement , if the candidate has the required skills.

**Courses**

**UG Courses:** BDes in jewellery design, B.Sc. in jewellery design, BA in jewellery design and BVoc in jewellery design

**PG Courses:** MDes. In jewellery design, M.Sc. in jewellery design, MBA in jewellery design.

**Diploma courses** are also available.

**Required skills**

* Good communication skills
* Visual imagination
* Eye for detail
* Adequate knowledge of past and present market trends
* Creativity
* Innovativeness
* Intra personal skills
* Knowledge of different metals and gems

**JEWELLERY DESIGN UG COURSES**

**BDes Jewellery design**

**BA Jewellery Design**

**B.Com. Jewellery**

**B. Sc. Jewellery**

**Gemology**

**Diamond grading**

**Jewellery manufacturing**

**BBA Jewellery Design and Management**

**Diploma Programme in Jewellery design and Technology**

**Comprehensive Jewellery Designing**

**Basic jewellery Designing**

**Jewellery Design: Finishing, polishing and electroplating**

**Jewellery Design: Engraving and Enameling**

**Jewellery Design: Stone setting**

**Gemology course**

**Diamonds**

**Coloured Gemstones**

**Diamond Grading Course**

**Colour**

* Colour grades, origin and nomenclature, colour grading systems, colour measuring instruments

**Clarity**

* Clarity grades, origin and nomenclature, clarity grading systems, external and internal features

**Carat**

* Weight estimation of hublot replica sale, different cuts such as eight cut, carre, ful cut, navettes, drop shape along with instruments for weight estimation of round brilliant.
* Plotting and grading of cut and polished diamond by colour, clarity-external and internal features, cut symmetry features, calculation of proportions fake rolex sale and cut evaluation
* Diamond and its stimulants including synthetic moissanite and synthetic cubic Zirconia rado replica along with their identification techniques
* Diamond synthesis, treatment of diamonds and the method of detaction/identification

**Gemstone identification Course**

**Jewellery Design, quality control course**

**Jewellery Photography Course**

**Career in the Industry**

1. Starting salary as a jewellery designer is about 70-80 thousand repees per month
2. After having some years of experience, you can be the part of management of any jewellery design company.
3. Starting your own company.
4. Can work with smaller private player or a big brand as an employee. Can work as a repair person or lapidary. It all depends upon your experience and skill
5. You can join the vendor in order to grow your career. It is not difficult to findvendors associated with jewellery industry
6. You can leave the industry and run your mass production or a small unit.
7. You should realize what your future plans are in this industry. Freelancing, own company or something better.

**Institutes/ colleges**

* Allen School of Arts and Design, Jaipur
* Indian Institute of Gem and Jewellery, 19-22, Jhadewalan flatted factories, Delh

1. Courses across 3 streams (<http://www.iigjdelhi.org>)

(a reputed institute)

* Indian Institute of Gem and Jewellery, Jaipur
* Gemological & Jewellery Institute (GJI) (www.gjionline.com)

L-75, LGF, Shiv Mandir Marg, Lajpat Nagar-2

* 1. **MEDIA AND EVENT MANAGEMENT COURSES**

1. BA (Hons) Mass Media in Hindi
2. BA Media Technologies
3. BBA Media Management
4. BBA Media and Communication
5. BBA Event Management
6. B.Sc. Visual Media
7. Bachelor of Multimedia Communication
8. MA Communication
9. MA Media studies and Production
10. MBA Event Management
    1. **GRADUATION AND POST GRADUATION IN**

**STUDENTS’ WELFARE (JMI)**

* 1. **UG AND PG IN HEALTH CARE AND GYM**
  2. **B.A. IN SCRIPT WRITING**
  3. **ADMINISTRATION AND MANAGEMENT**

**(BBA, MBA and further studies in India and abroad)**

**1.31 MEDIA AND COMMUNICATION STUDIES.**

1. B.A. with Journalism—3 years
2. Bachelor in Journalism (B.J)\_\_3 years
3. Bachelor in journalism and Mass Communication—3years
4. B.A. with Mass Media—3 years
5. B.A. in Script Writing
6. Journalism, TOI and other Universities
7. Graduation and Post-graduation in students’ welfare—

Jamia Millia Islamia.

1. Travel and Tourism Management (12 months)

Different Polytechnics

1. Airfares, Ticketing (6 months)

Different Polytechnics

1. Fast Track (3 months) Mob—08130876777, 09810091297 [E-mail—enrol@thecreativacademy.in](mailto:E-mail—enrol@thecreativacademy.in) Web—www.thecreativeacademy.in
2. Sports and Sport education

(D.P. Ed, B.P.Ed, M.P.Ed, *Delhi, Lucknow* )

1. Health care and Gym.
2. Food Technology.
3. Foreign language,

French, German, French, Arabic. Etc.

1. Administration and Management

(BBA, MBA and further studies in India and abroad).

1. Communication and media studies. Selection of subject depends upon interest, aptitude, and inclination of the individual student.
2. PG Diploma in managing diamond -jewelry business

Duration—1 year (GD Goenka University)

1. Indian Institute of Tourism Travel Management (IITTM): two-year MBA

Qualification: Graduate, 50% marks, clear entrance test, CAT, CMAT, XAT, GMAT, ATM or IITTM

Tourism and travel: Gwalior and Bhubaneswar

Tourism and leisure services: NOIDA.

Tourism and International Business: Gwalior

1. Foreign destinations.

**1.32 FOOD TECHNOLOGY**

**Food Technology Certificate Courses**

1. Certificate Course in Food Production and Patisserie
2. Certificate Course in Food Technology

**Diploma Courses**

1. Diploma Course in Food Science and Quality Control
2. Diploma in Food and Nutrition
3. PG Diploma in Food Analysis and Quality Control
4. Trade Diploma in Hotel Management (TDHM)
5. Food Production

**Bachelor Courses in Food Technology**

1. B.E. (Food Technology and bio-chemical Engineering)
2. B.E. (Food Technology)
3. B.Sc. Food Science and quality control
4. B.Sc Food Science
5. B.Sc. Food Technology
6. B.Sc Microbial and Food Technology
7. B.Sc. Nutrition, Food Service Management and Dietetics
8. B.Tech. Food Science
9. B.Tech Food Technology

**PG in food technology**

1. M.A. Food Nutrition
2. M.E. Food Technology
3. M.E. Processing and Food Engineering
4. M.Sc. Food Science and Technology
5. M.Sc Food technology
6. M.Sc Microbial and Food Technology
7. M.Tech Food and Nutrition
8. M.tech. Food Biotechnology
9. M.Tech Food Chain Management
10. M.Tech. Food Engineering and Technology-integrated
11. M.Tech Food Engineering and Technology
12. M.Tech. Food Processing Technology (integrated)
13. M.Tech Food safety and Standards.
14. M.Tech. Food Technology
15. Ph.D. Food and Dairy Technology
16. Ph.D. Food Biotechnology
17. Ph.D Food Engineering and Technology
18. Ph.D. Food science and Technology
19. Ph.D. Food Technology
    1. **HOTEL MANAGEMENT AND FOOD SERVICES**

**Institute of Hotel Management Catering & nutrition (IMH), Pusa, New Delhi**

**Affiliated to IGNOU.**

**Enterence Review:** The exam is called JEE, conducted by—NCHMCT

Fee about 2.3 lakh

Duration – 3-years.

* 100 other Management Institutes in Delhi (NCR)

**Other Avenues**

* Hotel management and food services.

**Institute of Hotel Management Catering & nutrition (IMH), Pusa, New Delhi**

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Fee about 2.3 lakh

Duration – 3-years.

* 100 other Management Institutes in Delhi (NCR)

**1.34 HUMAN RESOURCE DEVELOPMENT (IMI, IGNOU)**

Human resource Development (HRD) can be defined as a set of systematic and Planned activities designed by an organization to provide its members with opportunities to learn necessary skills to meet current and future job requirements.

Learning is the fundamental principle that drives organizations towards higher concentration on Human Resource Development.

HRD activities should begin when an employee joins an organization and continue throughout his career, irrespective of the authority level that the person holds.

Companies require their human resource management professionals to possess a bachelor’s degree or even a Master’s degree particularly for senior-level leaders like HR directors and labor Relations Managers.

It is very rare to find an entry-level job in the HR field without at least a bachelor’s degree.

**Bachelor’s degree in human resources or human resource management may be designed as;**

* Bachelor of Science (BS)
* Bachelor of Arts (ba)
* Bachelor of Business Administration (BBA)
* BS/BA degree programs are most often designed as
* BA/BS in Human Resource Management
* BS/BA in Management with a concentration in Human resources.

Because of the business focus of most human resources degree programs, Bachelor’s degrees are often designed as;

* BBA wit concentration in human Resources.
* BBA with a concentration in Organizational Behavior.
* BBA with concentration in Industrial Relations.
* BBA with a concentration in Management and Leadership.

**Bachelor’s degree programs**

are designed to prepare students for entry-level positions in any number of Hr areas, such as;

* Employment and Recruitment ‘
* Training and Development.
* Compensations and benefits.
* Employee and Community Relations.
* Personnel records.
* Health and safety strategic planning.

**JOB OPPORTUNITIES**

**JOB OPPORTUNITIES IN HUMANITIES**

1. **Teacher**
2. **Advertising Sales Agent**
3. **Technical Writer**
4. **Artist**
5. **Counselor**
6. **Event Organizer**
7. **Public Relation Manager**
8. **Travel Agent**
9. **Lawyer**
10. **Editor**
11. **Museum Worker/Curator**
12. **FBI Agent**
13. **Genealogist**
14. **Advertising Manager**
15. **Foreign Correspondent**
16. **Human Resource Specialist**
17. **Linguist**
18. **Civil Services**
19. **Police**
20. **Indian Armed Forces**
21. **And many more opportunities in different fields**

**CIVIL SERVICES**

**(IAS, IPS, IRS, IRS, etc. Conducted by UPSC)**

**Civil services Examination**

It is a nationwide competitive examination in India conducted by Union Public Service Commission for recruitment to various Civil Services of Government of India including Indian Administrative Services (IAS), Indian Foreign Services (IFS), and Indian Police Services (IPS)

**UPSC Examination:**

it is conducted in three phases – a Preliminary Examination consisting of two objective-type papers (General Studies Paper I. and General Studies Paper II also popularly known as Civil Services Aptitude Test CSAT) and a main examination consisting of nine papers of conventional type (essay type), in which two papers are qualifying and only marks of seven are counted followed by a personality test (interview)

**Process:**

The Civil Service Examination is based on the British Raj-era Imperial Civil Service tests conducted by old Indian Empires such as in the Maryann Empire and Munhal Empire. It is considered to be one of the most difficult competitive examinations in India. on average, 9,00,000 to 10,00,000 candidates apply every year and t+he number of candidates sitting is approximately 5,00,000.

**Stage I:**

**Preliminary Examination** held in June every year **results** are published in mid August

**Stage II: Mains**

1. Examination held in October every year. Results are announced in January.
2. Personality test (interview) - held in March. Final results are usually announced in May.
3. The training program for the selected candidates usually commence the following September.

**Eligibility**

* Must be an Indian Citizen
* A Citizen of Nepal or Bhutan
* A Tibetan refugee who settled permanently in India
* A person of Indian of Indian origin who has migrated from Pakistan, Myanmar, Sri Lanka, Kenya, Uganda, Tanzania, Zambia, Malawi, Zaire, Ethiopia with the intention of permanently settling in India.

**Educational Qualification**

* A degree from central, state or a deemed university
* A degree received from correspondence
* A degree from an open university
* A qualification recognized by the Government of India as being equivalent to one of the above.
* Candidates who have appeared in ann examination the passing of which would render them educationally qualified enough to satisfy one of the above points.
* Candidates who have passed the final exam of the MBBS degree but have not yet completed an internship.
* A degree from a private university
* A degree from any foreign university
* The candidates who have passed the final exam of ICAI, ICSI, ICWAI

**Age limit (August, 1)**

* 21 years to 32 years – for general category
* 37 – for SC/ST
* 40 years – for defense service personals disabled in operation during hostilities.

**Number of attempts**

General category – 6

1. OBC ------------------ 9
2. SC/ST ----------------- no limit till 32 years

* Appearing to attempt one of the papers in the preliminary examination is counted as an attempt including disqualification/ cancellation of candidature
* However, applying to sit in the exam but, failing to attend is not counted as an attempt.

**Army, Navy and Air-force.**

Age—18 to 21 years

Qualifications—10+2 (from a recognized institution)

Height—minimum 170 cm

CHEST: minimum 81cm to 85 cm (with minimum expansions of 4 cms.)

Sub-inspector in DP.

Qualification: Graduation

Selection: through Staff Selection Commission (SSC) through graduate Level Examination under central armed **police** forces (CAPF) which covers all the Para Military Forces of the Country.

Career opportunities available in DP

* Constable
* Ministerial cadre
* Sub-Inspector
* Assistant Commissioner of Police

Recruitment 2019,

Notification—15000 vacancies

Form, apply on line: www.delhipolice.nic.in

10th pass and 12th pass

Age: 18—30 years

All details are available at official website:

delhipolice.gov.in

delhipolicerecruitment.nic.in

height: minimum 165 cm.

chest: minimum: 76 cm (unexpended) &80 cms expended

1. Physical Standard Test (PST)
2. Physical Efficiency Test (PET)
3. Written Examination (OMR based or CBT based)
4. Personal Interview (PI)
5. Document Verification (DV)

**They are required to appear for physical examination, written test and interview**

**Police.**

Age—18 to 21 years

Qualifications—10+2 (from a recognized institution)

Height—minimum 170 cm

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**They are required to appear for physical examination, written test and intervie**

**PG IN HUMANITIES**

* To produce committed, value based and intellectual approach that contributes to the advancement of academics and the fields related to the practical life. Subjects of studies available for study in Humanities
* Teacher (UG and PG)---In subjects such as; History, Civics, Economics, , History, Pol. Sc., English and other languages, Sociology, History;

**HUMANITIES (at higher level)**

**Purpose of studying**

* To produce committed, value based and intellectual approach that contributes to the advancement of academics and the fields related to the practical life. Subjects of studies available for study in Humanities
* Teacher (UG and PG)---In subjects such as; History, Civics, Economics, , History, Pol. Sc., English and other languages, Sociology, History;

Avenue of **study of History at higher level,**

* study of historiography (study of the methods of historians in developing history as an academic discipline)
* historical research methods, study of specific periods

**Main specializations**

* Archaeology
* Museology: the science or practice of organizing, arranging and managing museums.
* Archival studies. Most of these courses are offered at PG level. Students specialize in particular object of study and become experts in coin (numismatist), weapon sculpture, deciphering of inscriptions (epigraphist*).*

**Employment:**

* Archaeologists employed by ASI for about 3600 monuments, museums Research institutes.

**PG in other Subjects**

**Education-**

* B.Ed.,
* M.Ed.
* M.A. (in educational) and research in Education
* Education management.

**Master’s Degree programs in Human Resources**

**2. COMMERCE**

**2. COMMERCE**

Students wishing to choose commerce stream need to get themselves more acquainted with the subject like economics, accountancy, finance, business mathematics, book-keeping, etc. and also develop an interest in them.

**Definition**

Commerce as a stream of education can be defined as the study of trade and business activities such as the exchange of goods and services from producer to final consumer.

**Why studying a Bachelor’s in commerce**

* Commerce is a popular choice among students after passing 10th standard.
* It opens doors that lead to professional courses, which acts like foundations.
* The diversity that commerce stream offers is one of the main factors that still attract many 10th standard students.
* If anyone is good in numbers, good at analyzing and dealing with large chunks of data, have a taste in finance and economics, commerce stream will suit him.
* Students studying commerce stream have a thoughtful outlook on the outside world.
* This career has lots of difficult challenges and practical facts added to it.
* Most students opt for commerce because they want to take the next step in business and follow the strategies to become successful.
* Due to the popularity of commerce among most of students, many countries have brought up excellent career-related opportunities for the students in this stream, including India.
* The most respectable career options in this stream are Chartered Accountant and MBA position holders.
* Commerce is soon becoming a new way of modern life and setting a new direction for students to lead their life in the best possible way.
* Students wishing to choose commerce stream need to step up and start to choose commerce after 10th.
* Choose this field only if you have genuine interest in economics, accountancy and business studies.
* Students are advised to choose this field if they have an affinity for numbers and have more interest in business and economy.

**Subjects Studied in 11th and 12th**

**1) ENGLISH**

* English is a language which is required to answer the questions in all the subjects from the text-books students read during their course of study in senior secondary and all post senior secondary classes.
* Additionally there would be some letter writing, essays, article writing, note making etc. we need to be expert in basic skills of communication.

**2) MATHEMATICS**

* It will include topics ranging from algebra, trigonometry, geometry and all the topics those will be needed in CAT or GMAT (provided, if a student is serious about pursuing a career in commerce/business).

**3) ACCOUNTING**

* Accountancy is a branch of mathematical science that is concerned with the financial information about a business entity to users such as shareholders and managers.
* The financial communication that is studied under the subject is generally in the form of financial statements that show in the terms of money the economic resources under the control of the management.
* Studying the accountancy enables a student to learn and discover the various causes of success and failures of different business enterprises.

**4) BUSINESS STUDIES**

* A subject essentially applied in ones whole life.
* It will introduce to the concept of marketing, finance, organizational behavior and business world.
* The concepts introduced at the initial stage, one essentially will be going deeper and deeper into these concepts which are introduced now.
* The main area of study in these subjects include business organizations, their various features, structure and functioning, marketing, operations management, human resource management etc.

**5) ECONOMICS**

* This subject which teaches why the world works in a certain wayin very simple terms?
* We will learn, what is demand, supply, their interplay, the business systems, consumers behavior, production concepts, cost concepts and everything in between.
* We will also be familiarized with the concepts of growth, development, poverty, inequality and governance.
* Economics has two broad branches –micro- economics, where the unit of analysis is the individual agent, such as household or a firm and macro—economics, where the unit of analysis is an economy as a whole.
* Students wishing to choose commerce stream should understand that this subject is not the easiest alternative as compared to science. Even though science and commerce are complex study areas in their own ways, they cannot be compared with each other. Therefore if a student wishes to pursue the choice of making a career in commerce stream only because they feel that science is not a suitable stream for them, they need to rethink their priorities and their choice. Students choose commerce stream only if they have an aptitude as well as an avid interest in it. Do choose commerce after 10, if you are interested in it.

**B.Com Courses**

* B.Com is a 3-year degree course in Commerce. Passing 10+2 with Mathematics and English as core subjects is the minimum eligibility. Among students, B.Com has become one of the popular undergraduate courses in India.
* There are 3 modes of having a B.Com degree.

**2.1 B.Com (Pass)**

it imparts knowledge and overview the Commerce subjects, but in this students have no option for specializing in a particular subject.

**2.2 B.Com (Hon.)**

* By opting B.Com (Hon.) a student has the option to specialize in a particular subject like Economics, Accounting etc. It enabkes the students to grab an in-depth knowledge of subjects.

**2.3 B. Com (Hon) vocational**

* It is a skill development course and the job orientation on the basis of that particular skill is the main objective of this course. By pursuing B.Com (vocational), students can specialize in skill-based subjects.

**Specialization in skill-based subjects**

* In the past B.Com. used to be a general course, covering no. of subjects, which were commonly related to commerce sector. Students had to select a combination of subjects that they had to then pursue. At present the old B.Com. program is offered across colleges in India.
* Along with it, newly introduced specialization programs are also being offered across many Indian colleges. To specialize in a specific domain, there are various specializations that are provided to help aspirants.

**2.4 B.Com. (Management studies)**

* It is a full-time undergraduate Management course . 65% marks in 10+2 is the minimum requirement in the subject. In this course, students learn to suggest and diagnose some solutions for managerial and operational problems. Major topics include in this course are commercialization, statical research, customer demands and trade and labour market.

**2.5 B.Com Economics (Hon.)**

* B.Com in Business Economics is a 3-year undergraduate commerce course. It comprises of the challenges and financial issues that come in the way of organizations in market place or economy. This course enables the candidates to solve economic problems in public and the private sector.

**2.6 B.Com (Hon.) Computer Application**

* It is application software which is designed to help the user to perform specific tasks. The course aims to produce qualified and trained personnel for fields such as banking, insurance, accounting, stock markets, e-commerce and marketing besides teaching jobs in universities and colleges.

**2.7 B.Com (Hon.) Foreign Trade Management**

* It is a 3-year undergraduate program involving an advanced study of economics, business, accounts and their management. The course’s ambit includes accounting of expenditures, management of resources, study of business relations, and management of trade flow, among others.

**2.8 B.Com (Hon.) Taxation**

* It prepares the students for a professional qualification in taxation, finance and accounting and provides a solid base in the field of taxation, accounting and finance, thus making it easier to acquire leadership/managerial role in the financial sector.

**2.9 B.Com (Hon.) Banking Management**

* This course aims to create trained professionals who can handle various financial activities associated with banking sectors and operate effectively in the banking environment in the financial service sector along with handling various techniques employed in the field of banking.

**2.10 B.Com (Hon.) Accountancy**

* It is an undergraduate commerce. It puts a strong emphasis on developing analytical skills and offers a solid grounding and professional competence in all aspects of accounting.

**2.11 B.Com (Hon.) E-commerce**

* The course aims to equip eligible candidates with advanced leaning in online business practices of organizations and procedures involved in managing a business online. With internet becoming a household name, e-commerce transactions are also fast gaining popularity. Business transactions that take place over the internet are referred to as e-commerce

**Delhi based Indian School of Business and Finance (ISBF) affiliated to London School of Economics and Pol. Sc.(LSE)**

**2.12 B.Sc.(Economics and Finance)—3 years full time (Hons.) program.**

**2.13 B.Sc. Economics.**

**2.14 B.Sc. Economics and Management**

**2.15 B.Sc. Business and Management** (www.applyto.isbf.com)

The course include—financial accounting, management and behavioral process, fundamental of tourism, business economics, tourism geography, business statistics, business economics, tourism marketing

Employers-Banks, Brokerage firms, CA firms, Consultants, Audit firms, IT organizations, Ad agencies, Tourism companies, Self run business etc.

**PG COURSES**

1. **Cost and Management Accountant -- CMA**
2. **Certified Financial Planner – CFP**
3. **Integrated BBA+MBA – 5 years**

**2.16 COMPANY SECRETARY**

The Institute of Company Secretaries of India (ICSI) is a premier National Professional body established by Act of Parliament to develop and regulate the Profession of Company Secretaries.

ICSI imparts training in Company Secretary ship by Distance learning (by correspondence) enabling students to qualify as Company Secretaries. The Institute provides “course material” for all the subjects at the time of Registration. There is also provision for optional Oral Coaching classes.

Career as a Company Secretary is not only prestigious and financially rewarding but also carries with it a high level of job satisfaction.

***Stages to become a Company Secretary***

The student who would like to join the course after 10+2 has to undergo thee stages to pursue the Company Secretary Course i.e.

* Foundation Program
* Executive Program
* Professional Program

In addition, the student has to undergo Practical training for about 15 months which a student may opt to start after passing the executive Program

The student who would like to join the course after passing the graduation has to undergo two stages;

* Executive Program
* Professional Program

Besides the student has to undergo Practical training for about 15 months

* Foundation Program which is of 8 months duration can be pursued by 10+2 pass students of Arts, Commerce and Science streams.
* Executive Program can be pursued by a graduate of all streams except Fine Arts.

For details contact

ICSI Headquarters, ‘ICSI House’, 22- Institutional Area, Lodi Road, New Delhi- 110003

Phone no. 011-41504444, 24617321-4, 24644431-32

E-mail: [info@icsi.edu](mailto:info@icsi.edu). Website: [www.icsi.edu](http://www.icsi.edu) Duration: 3 years including training period.

**2.17 B.Com (Hon.) Industrial Management**

It deals with the people in industry, material, energy and leading towards production growth. This course is designed to develop understanding of various functions of management, role of workers and engineers and providing knowledge about safety of labour, industrial laws and management in different areas. Course is concerned with the creation and management of systems that incorporate people, materials and energy in productive ways.

**2.18 B.Com Banking and Financial Management**

This course provides basic knowledge in the field of banking and finance, such as basic banking, banking law, finance regulations, accounting etc. Graduates in this stream have a wide range of opportunities like bank, business schools, credit organizations, consultancies, economic consulting jobs, Indian Civil Services, insurance industry, securities industries and investment etc.

**2.19 Bachelor in Accounting and Finance**

**Introduction**

Bachelor of Accounting and Finance (BAf) is a 3-year undergraduate course program that offers in-depth knowledge in accounting and financial subjects by different means such as classroom teaching, seminars, projects, practical training, industrial visits, conferences, expert talks etc.

The course helps to acquire knowledge in the field of accounting, taxation, auditing, risk management, financial accounting managerial economics, business law and business communications.

**Eligibility**

* 10+2, Commerce, minimum marks—55%
* Admission to BAF program is strictly on the basis of merit/cut off list

**Institutions/colleges/universities**

* Lovely Professional University Delhi, 3,95,000 annually
* Lovely Professional University, Jaladhar, Rs. 2,37,000 annually
* Bharat University, Chinnai, 1,50,000 annually
* Mahatma Jyoti Phoole University, Jaipur, Rs. 60,000 annually
* Hem Wati Nandan Bahuguna Garhwal University, Rs. 3,750 annually

**Career options and job prospects.**

After the completion of course there are many career options to choose from. Candidates who are keen to go for studies can go for MBA in finance which is one of the most common option after graduation.

Listed below are some of the popular job roles for BAF graduates ;

* Financial consultant
* Accounting analyst
* Marketing manager
* Billing data analyst
* Accounts assistant
* Finance analyst

**Career options after BAF;**

* Chartered Accountant
* Chartered Financial Analyst (CFA)
* Company Secretary (CS)
* ATM Global Business School, Delhi.

**2.20 Economics (Hon.)**

**Introduction**

It is the social science that analyses the production, distribution and consumption of goods and services. It is a 3-year undergraduate degree course and may also be provided on part time basis by certain institutes. It is semester system based and is career orienting in nature that provides many jobs for the students.

**Eligibility**

10+2

Admission in DU is merit

**Institutes/colleges**

* SRCC and many other colleges of DU
* JMI
* AMU
* School of Distant Education, DU
* IGNOU
* Delhi based Indian School of Business and Finance (ISBF) AFFILIATED TO LONDON School of Economics and Pol. Science

**Benefits of studying Economics**

* Teaching at schools and colleges
* Banking and related sectors
* Indian Economic Services Reserve Bank of India
* Planning commission, Ministry of Economics and other Govt. departments
* Agriculture companies
* Economics research Institutes
* Stock exchange
* Banks/ credit unions
* International trade companies
* Statistical research firms
* Sales analyst
* Securities analyst trainees
* Investment analyst
* And many other institutions

**2.21 B.Sc. Economics and Management**

**Introduction**

**Eligibility**

**Courses**

* Undergraduate 3-year program
* M.Sc. Economics

**Institutions/colleges**

* Various colleges of DU offer the course.
* Achrya Narender dev college, Delhi
* Shiv Nader University, Greater Noida
* DAV school of Management, Faridabad, Haryana.

**2.22 B.Sc. Business and Management**

**Introduction**

* Business and Management studies course provides students with an awareness of broad range of knowledge required in modern management and equip them with specialized knowledge to tailor the degree to meet their own individual needs and career plans. The course aims at developing the analytical and behavioral skills which students require to make effective use of knowledge after graduation
* The course includes—financial accounting, management and behavioral process , fundamentals of tourism, business economics, tourism geography, business statistics, business economics, tourism marketing etc.
* **Employers;**

Banks, brokerage firms, CA firms, consultants, audit firms, IT organizations, ad agencies, tourism companies, self-run business etc.

**Eligibility**

**Courses**

B.Sc. business and Management and other related Post Graduate courses

**Institutions/colleges**

**2.23 B.Sc. Hon. (Economics and Finance)**

**(3 years full time program)**

(www.applyto.isbf.com)

The course include—financial accounting, management and behavioral process, fundamental of tourism, business economics, tourism geography, business statistics, business economics, tourism marketing

Employers-Banks, Brokerage firms, CA firms, Consultants, Audit firms, IT organizations, Ad agencies, Tourism companies, Self run business etc.

**2.24 Bachelor of Business Studies (BBS)**

**Introduction**

* It is an undergraduate course in **Commerce.** The field of Business Studies combines the elements of accountancy, finance, marketing, organizational studies, and Economics. The course facilitates the combination of academic knowledge and practical work.
* BBS is somewhat similar in format and structure to B.Com, BBA, and Bachelor of Business Science (BBusSci)
* BBS is aimed at helping students develop business-based intellectual and interpersonal skills.
* The course involves lesions in business-related courses and combines two courses—Business and Finance.
* The Business section includes subjects focusing on Organizational Studies, Marketing, Economics, Human resources etc. and the Finance section deals with the subject that are related to topics like, Organizational Finance Studies, Computing and Accounting.

**Eligibility**

* 10+2 Commerce
* Admission through entrance test conducted either at the National level or by the University
* Average tution fee Rs. 6000/- to Rs 1,00,000

**Course**

* BBS
* MA, M. Phil, Ph. D, MBA,

**Institutions/colleges/universities**

**2.25 Bachelor of Business Management (BBM)**

**Courses available after BBM**

* Computer Science Engineering
* Mechanical Engineering
* Civil Engineering
* Electronics and Communication Engineering
* Aeronautical Engineering
* Aerospace Engineering
* Information Technology
* Electrical Engineering

**Job opportunities for graduates in BBM**

* Teacher and Lecturer
* Business Development Manager
* Quality Assurance Analyst
* Business Consultant
* Trainer employee/human Resource.

**2.26 Chartered Accountant (CA)**

**Introduction**

* In Scotland, Chartered Accountants were the first to form a professional Accounting Body in 1854.

***The Edinburgh Society of Accountants 1854,***

***The Glasgow Institutes of Accountants and Actuaries 1854, and***

***The Aberdeen Society of Accountants 1867,*** were each granted a Royal character almost from their inception.

* The title is an internationally recognized professional designation.
* Women were able to become Chartered Accountant only following Sex Disqualification (Removal) Act, 1919, after which,
* In 1920, **Mary Harris Smith** was recognized by the **Institute of Chartered Accountants in England and Wales** and became the first woman Chartered Accountant in the world.
* CA work in all fields of business and finance, including auditing, taxation, financial and general management. Some are engaged in public practice work, other work in the private sector and some are employed by the government bodies.
* Chartered Accountants’ Institutes require members to undertake a minimum level of continuingprofessional development to stay professional competitive.
* They provide support to members by offering advisory services, technical help lines and technical libraries.
* They also offer opportunities for professional networking, career and business development.

**What is Chartered Accountancy**

* It is a designation given to an accounting professional who has received certification from a statutory body that he/she is qualified to take care of the matters related to accounting and taxation of a business, like file tax returns, audit financial statements and business practices, maintaining records of investments, preparing and reviewing financial reports and documents. A **Chartered Accountant** is also qualified to offer advisory services to clients who include companies and individuals.

**Eligibility**

* 10+2 in any stream with just passing marks.
* But, most of the students from commerce stream prefer to choose it.

**How to become a Chartered Accountant**

Becoming a Chartered Accountant requires completion of 3-levels of training designed by the *Institute of Chartered Accountants of India* (**ICAI**).

* **ICAI** is a statutory body which maintains the profession of Chartered Accountancy in India.
* **ICAI** was established on July 1, 1949 through an act of Parliament.
* It conducts CA exams and certifies a candidate as a **qualified Chartered Accountant** on successful completion of the three level/courses.

**Examinations conducted to acquire a CA degree are;**

1. Common proficiency test **(CPT)**—is the entry level exam for CA course. It is conducted twice a year, in **June and December.**
2. Intermediate (integrated Professional competence) Examination. **(IPCC).**
3. **Final Examination;**

***Intermediate and Final examinations are conducted in May and November***

**Entry Routes for CA**

1. *Foundation course route after passing 12th class or Common proficiency test (CPT)*
2. *Direct entry is for those who have completed Graduation (IPCC)*

(or after completing CPT)

**A. Steps under Foundation course Route Entry**

* Register with Board of Studies (BoS) after appearing in or clearing class 12th examination
* Complete 4 months study period (bi-annual registration till: 30th June/31st December)
* Appear for foundation examination in November/May.
* Qualify Foundation course.

**CPT covers 4 basic subjects divided into two sessions**

1. Accounting (60 marks) + Mercantile Law (40 marks)
2. Economics (50 marks) + Quantitative Aptitude (Math and Statics--50 marks)

*Total aggregate pass marks requirement is 50% and 33% marks requirement for individual subject.*

1. It consists of an objective type examination and of 200 multiple choice questions.
2. It is to be remembered that negative marking is there.

For students of commerce stream, no coaching is required as such. They can easily clear the Foundation course (CPT), but students from Arts and Science stream may require coaching.

**Steps Under Direct Route Entry** (or after clearing CPT) **to IPCC**

* As soon as you clear CPT, you are eligible for Intermediate or IPCC.
* Register with BoS for the Intermediate Course
* Its examination is held in May and November
* Along with IPC you can do your regular college. It is not difficult for sure.
* Generally it happens that students clear their IPC during their college time and wait in 3rd year for exams of their regular graduation
* After appearing at 3rd year exam, they start Article ship.
* Complete 8 months of study course
* It is a written examination.
* It consists of two Groups having four and three papers respectively

**Group I**

Paper1. Accountancy

Paper2. Business Law, Ethics and communication

Paper3. Cost Accounting and Financial Management

Paper4. Taxation

**Group II**

Paper 1. Advanced Accounting

Paper 2. Auditing and Assurance

Paper 3. Information Technology and Strategic Management

* Each paper carry 100 marks i.e. Total 700 marks.
* For each paper 40 is the pass percentage and aggregate for clearing each group is 50%.
* Appear and pass in either or both groups of Intermediate Course.
* Register for 3 years practical training on passing either or both the groups of Intermediate Course.
* Register for the final course after qualifying both the groups of Intermediate Course.
* Complete Four Weeks Advanced Integrated Course on Information Technology and Soft Skills (AICITSS) after clearing it during the last 2 years of Practical Training (Articleship) but, before appearing for Final Examination.
* Appear in Final Examination during last 6 months of practical training (Article ship).
* Articleship is the spinal-cord of this training
* It is of 3-year duration.
* There is an option
* If you clear, if you clear a Group of IPCC you can start Articleship. But, it is advisable for starting the Articleship—join it only after clearing both the Groups.

**Article ship in CA firms**

* When you complete 2 and a half year of your Articleship you are eligible to appear for CA Finals
* You may join your Articleship with;

1. Big CA firms,
2. Mediocre firms or
3. With any individual CA practitioner.

* Your exposure and experience in these firms will determine your future progress and Income. So, think hundred times before joining any firm for your Articleship.

**CA Final Examination**

**Group I**

Paper 1. Financial reporting

Paper 2. Strategic Financial management

Paper 3. Advanced Auditing and Professional Ethics

Paper 4. Corporate and Allied Laws

**Group II**

Paper 1. Advanced Management Accounting

Paper 2. Information System Control and Audit

Paper 3. Direct Tax Laws

Paper 4. Indirect Tax Laws

**For passing the Final Exam Criteria is as under**

* 40% in individual papers and 50% in aggregate.

**How difficult is to be Chartered Accountant**

* It all depends upon the candidate. If you are really serious about CA then you would love to be CA. However, if there is no interest inside you then it is really hard to become a CA.
* Only one out of 10 candidates is able to become a CA. It is very tough because, if you are short of getting even 1 mark then you might not clear the exam.
* So, it is really tough

**Final thought**

* It is said that, if one is really interested then go for CA. You love accounting ang auditing then CA is for you.
* Otherwise you can leave it and choose other line of work.
* You also need to make a final decision when you want to take a plunge. The right timing is very important.
* Whether you want to start the course right after 10th or 12th, you must be sure.
* But, if you are serious about CA then don’t wait for your graduation, join right after 10+2.

**Normal reading hours for IPCC are:** 4-5 hours or more

**Result:** IPCC-10 TO 12 Percent and **Final:** Generally below 10 percent

**2.27 PRPFESSIONAL COURSES AFTER 12TH IN COMMERCE**

There are plenty of courses to opt for in the stream. One need to choose career options that provide good scope in future and at the same time develops interest to pursue it among students. Selecting a career option is one of the major decisions in a student’s life. Thus it must be made wisely after proper attention and understanding the field.

1. Journalism and Mass Com
2. Hotel Management
3. Bachelor of Statistics
4. Diploma in Digital Management.
5. BFA
6. Bachelor of hotel management (BHM).
7. Bachelor of interior designing
8. Bachelor of design (accessory)
9. Bachelor of design (leather)
10. Bachelor of textile design
11. Bachelor of product design
12. Furniture and interior design course
13. Teachers’ training (B. Ed; M. Ed; M.A. education)
14. Diploma in Elementary Education
15. B. P. Ed (bachelor of physical education)
16. NTTE

**Specialized M.A. Courses in Economics**

1. M.A. Mathematical economics and Econometrics—Gujrat University, Ahmedabad.
2. M.Sc. in applied Econometrics—Bharathiar University, Coimbatore
3. M.A. Econometrics—Madras University
4. MS in quantitative Economics—Indian Statical Institute, Kolkatta, Delhi. The course includes Econometrics methods.
5. **SCIENCE**

**3. SCIENCE**

* Science is an important part of the foundation for education for all children.
* Science allows students to explore their world and discover new things.
* Science is the most important subject students study, because it gives them critical thinking skills they need in every subject.
* Science is a way of helping the brain grows in finding new knowledge.
* Science is important because it influences most aspects of everyday life including food, energy, medicine, transportation and many more activities.
* Science improves human life at every level, from individual comfort to global issues’
* Science knowledge allows us to develop new technologies, solve political problems and make informal decisions—both individually and collectively.
* One goal of science iss to provide natural explanations for events in the natural world.
* With science a student improves his education and communication.
* Technology is the practical science, with the use of it one can make his daily work easier.
* A school is not supposed to be a complete academic institution without science stream.
* Science is the most sought after stream among students at the 10+2 level. All CBSE schools across the country provide students with the option of choosing Science after class 10.
* Teaching the scientific method to students is teaching them how to think, learn, solve problems and make informed decisions.
* These skills are integral to every aspect of student’s education and life from school to career.
* The process and ideas of science are of great importance to everybody in three ways. The first is in their personal lives, for example, they can validly identify the components of a healthy life style.
* The second is in their civic lives, so that they take an informed part in social decisions, for example, on future options for electricity supply.
* The third is in their economic lives, where they need to be able to respond positively to change in the science-related aspects of their employment.
* If the major purpose of science education is to increase the flow of specialist scientists, technologists and engineers, then young people with special talents in science should be identified as early as possible and provided with a separate, specialized and highly focused science education.

**3.1 BACHELOR OF SCIENCE (B.Sc.)**

**3.2 B. Sc. (Hon) Physics**

* 1. **B.Sc. (Hon) Chemistry**

**3.4 B.Sc. Bio-chemistry**

**3.5 B. Sc. Mathematics (Hon)**

**3.6 B.Sc. (Hon) Statistics**

**Introduction**

It focuses on the collection, meaningful segregation and interpretation of collected data. The curriculum is designed to teach students subjects like probability and permutation. After graduation one can pursue courses like actuarial science. It is a 3-year degree course. Graduating in Statistics opens up a variety of career opportunities for students

**Eligibility**

10+2 with Math as one of the subjects

**Job opportunities**

* One can become a business analyst
* Statistician are also required in government sector to work on studies and research on consumer prices, fluctuations in the economy, employment patterns, population trends etc.
* Opportunities are also available in private sector in marketing insurance and Information and Technology.

**Courses**

B.Sc. M.Sc.

**Colleges/universities**

**Average fee**

* Rs. 50,000 per year.

**After UG**

* M.Sc. Actuarial science
* M.Sc. in Library and information science.
* M.Sc.in Quantitative Economics.
* MCA.
* MBA.
* P.G. Diploma in statistics.

**3.7 B.Sc. (Hon) Botany**

**Jobs available**

After PG level there are plenty of jobs are in waiting.

* Teacher in schools and olleges
* Farming Consultant
* Environmental Consultancies
* Plant Pathologies
* Molecular Biologist
* Nursery Manager
* Ecologist
* Plant Explorer

**Institutions/colleges/universities**

**3.8 B.Sc. (Hon) Zoology**

**3.9 B.Sc. (Hon) Geology**

**Introduction**

* Geology is the science that comprises the study of the solid earth and the process by which it is shaped and changed.
* Geology provides primary evidence primary evidence for plate tectonics, the history of life and evolution and paste climates.
* In modern times geology is commercially important for mineral and hydrocarbon exploration and for evaluating water resources
* Important for the prediction and understanding of natural hazards. The remedial of environmental problems and providing insight into paste climate changes
* It plays an important role in geotechnical engineering
* It is a major academic discipline.

**Eligibility**

* 10+2 with science

**Courses**

* B.Sc., M.Sc. M.Phil., Ph.D.

**Employment areas**

* Teacher in school, college and university
* Oil companies
* Research labs.
* Content writing (geology)

**Institutes/Colleges/universities**

* AMU
* Maharishi Dayanand University, Delhi Road, Rohtak

**3.10 B.Sc. (Hon) Agriculture**

**3.11 B.Sc. Anthropology**

**Employability**

* M.Sc. for getting a Job
* Ph.D. for work as an advisor for any International agency

**3.12 B.Sc. in Audiology**

**Introduction**

* It is the undergraduate course in the science that explores hearing, balance, and related disorders. Practitioners of this science who treat those with hearing loss and proactively prevent related damage are Audiologists.
* The course is also available in the online mode.
* Audiology is a specialized field of study’
* The program is designed to train students in the techniques that are required for communications with patients who have impaired hearing and other related sensory disorders.

**Job opportunities**

* Administering auditory tests for babies, children and adults.
* Interpreting and reporting on test results.
* Developing and improving test techniques
* Communicating with a wide variety of patients

**Eligibility**

* 10+2 with Science stream

**Course**

* Audiology

**Institutions/colleges/universities**

* AIIMS, Delhi
* University college of Medical Science, Delhi
* Pt. Bhagwat Dayal Sharma Medical College, Rohtak
* Hamdard Institute of Medical Science and Research, Delhi
* Jamia Hamdard University, Delhi
* Amity University, NOIDA

**3.13 B.Sc. (Hon) Bio-informatics.**

**Courses**

* B.Sc. Bioinformatics
* BE Bioinformatics,
* B.Sc. + M.Sc. integrated Bioinformatics
* B.Tech Bioinformatics
* MBA Bioinformatics
* M.S. Bioinformatics
* M.Sc. Bioinformatics and Biotechnology
* M.Tech. Bioinformatics

**Institutions/colleges/universities**

**3.14 B.Sc. Cardiac Care Technology**

**Introduction**

It is a 3-year full-time under graduate course divided into 6 semesters. It is an allied course in medicine. Cardiac technologists assist physicians during invasive cardio-vascular testing. A tube is inserted into one of the blood-vessels that carry blood into the heart.

The job of a technician is to perform tasks that require less medical training before and during the procedure, so doctors can focus on the results of the test.

A patient’s life may depend on the efficiency Cardiac care technologists.

**Eligibility**

10+2 in science (PCB) from any recognized educational board. Minimum aggregate 50% marks.

**Course**

B.Sc. cardiac care technology

**Admission process**

Entrance test. Counseling after qualifying the entrance examination.

**Recruiting areas:** Private clinics, hospital administration, research and medical colleges etc.

**Job avenues**

* Cardiovascular technologist Rs. 6,68,000/per year.
* Medical sonographer, Rs. 7,00,000/year.
* Cardiologist, Rs. 16,00,000/year.

**Institutions/Colleges/university**

* Rajiv Gandhi Para medical Institute, Delhi, 10,000.
* Christian medical college, Vellore, (Fee- I,13,000 per year).
* Geetanjali University, Udaipur, (70,000 per year).

**3.15 B.Sc. Fisheries Science (B.F.Sc)**

**Introduction**

* Fisheries Science is the academic Discipline of Managing and understanding Fisheries
* It is multidisciplinary science, which draws on the disciplines of aquaculture including breeding, genetics, biotechnology, nutrition, farming, diagnoses of diseases in fishes, other aquatic resources, medical treatment of aquatic animals, fish processing including curing, canning, freezing, value addition, byproducts and waste utilization, quality assurance and certification, fisheries microbiology, fisheries biochemistry,
* Fisheries resource management including biology, anatomy, taxonomy, physiology, population dynamics, fisheries environment including oceanography, limnology, ecology, biodiversity, aquatic pollution.
* Fishing technology including gear and craft engineering, navigation and seamanship, marine engines, fisheries economics and management and fisheries extension.

**Duration**

* Fisheries science is generally **4-year** course typically taught in a university setting, and can be the focus of an undergraduate, postgraduate or Ph.D program

**Eligibility**

* 10+2 in science stream (PCB)

**Institutes**

* Central Institute of Fisheries Education
* CIFE
* CENTRAL Institute of Fisheries Education, Versova, Mumbai.
* Central Institute of Fresh water Aquaculture, Orissa
* Central marine Fisheries Research Institute, Kerala
* National Institute of Oceanography, Dona Paula, Goa.
* IIT, West Bengal
* Central Institute of Food technology, Kerala
* National Bureau of Fish Genetic Resources, Lucknow

**Career growth in Fisheries**

* Own business
* Assistant Fisheries Development Officer.
* Fisheries Extension Officer
* District Fisheries Development Officer

**Central government**

* Marine Product Export Development Authority
* FAO
* NACA
* Fisheries Survey of India
* NIO
* NABARD
* WHO
* EIA
* Academic Institutes (can apply as a research Assistant)
* Bio-chemist
* Asst. Professor (with M.F.Sc.degree) in faculty of Fisheries.

**National Banks**

* Field Officer or even Manager in Agriculture Loan Section

**Private Sector**

* Sea food Processing and Export Industry
* Fishing Gear Industry
* Aqua Feed Plant
* Pharmaceutical Companies
* In the area of Designing, Construction, management of fish-farm and hatcheries

**Foreign Jobs**

* Job opportunities in Australia, Japan, USA, Canada, china and European Countries. Gulf and many African Countries

***Deep sea Exploration for those who are interested in it***

**3.16 B. Sc. Forensic science**

**Introduction**

* It is a 3-year graduation course which involves the application of scientific knowledge to the investigation of crimes. Professionals in this discipline apply their knowledge of science to analyze the evidence found at a crime scene.
* An analysis could involve anything from an object at the crime scene, to soil, blood stains, saliva, body fluids, bones, finger prints, DNA profiling, recovering data from computers, researching new technologies etc.
* Its syllabus includes essential components such as Forensic Pathology, Psychiatry, Psychology, Forensic medicine and Odontology (Dentistry)

**Eligibility**

10+2 with science stream

**Courses**

Diploma in Forensic science and criminology,

Diploma in Forensic science and law

Graduation and PG

**Institutions/colleges/universities**

* Sharda University, Greater Noida
* Lovely Professional University, Jalandhar
* University of Mumbai

**3.17 B.Sc. Forestry**

* It provides the students with the knowledge and training about forestry
* It trains the students about the knowledge and training about Forestry.
* Forestry program trains students in managing of forests, new plantation, maintaining old plantations and other natural resources.
* The main aim of forestry studies is the creation and implementation of systems and framework for sustainable continuation of forest resources and supplies and to make sure that non-renewable resources do not get extinct.
* During the program, students are offered theoretical and practical knowledge regarding forestry and other related fields.
* Forestry professionals have various duties to perform such as managing forests and forest supplies, generating awareness and implementing new technologies in the forestry department.
* Candidates who are keen to take up a career in forestry must have a spirit of adventure, enthusiasm for outdoor activities, physical fitness and should be adaptable to the new surroundings.
* They also should have a keen interest in global concerns and how to preserve the environment.

**Duration of the course**

* 4 yers.

**Career options nd Job Prospects**

* Students, after pursuing B.Sc. in Forestry can find work, both in public and private sectors.
* They can work with Indian Council of Forestry Research and Education and various affiliated Forestry Research Institutes such as Institute of Social Forestry, Eco-rehabilitation, Forest Research Institute etc.

**Popular Forestry Employment Areas**

* Indian Council of Forestry Research and Education
* Forest Departments
* Zoological Parks
* Horticulture Departments
* Wildlife Research Institute
* Wildlife Department
* National Parks and Sanctuaries
* Wildlife Ranges
* Forest Nurseries
* Colleges and universities

**Listed below are suitable jobs**

* Assistant Manager
* Farming Manager
* School teacher
* Agri-Credit Manager
* Nursing Manager

**Institutes/colleges/universities**.

* Doon School Group.
* Vishwakarma University, pune.

**3.18 B.Sc. Genetics.**

**Introduction**

* Genetics is a branch of biology that covers all the branches under **genes,** variations and heredity and evolution in all the living organisms.
* Students are offered in-depth knowledge about how genetic traits are passed down from one generation to another
* The course includes topics from the subjects like Bio-chemistry, Genetic Engineering, Model Organisms, Microbiology, Cloning etc.
* Students who want to pursue Genetics must have a keen interest and an in-depth knowledge of medical genetics and cloning.
* They are also required to have an understanding of both old and new genetic theories.
* It is becoming a widely popular course among students these days, because of the new techniques and technological advancement in the field of genetics and life sciences have led to various new discoveries in the respective fields.

**Duration of Course:** 3 years

**Courses**

UG, PG and Research

**Job prospects**

* It opens career opportunities in various fields such as genetics, Material science, life sciences, bio-technology, Bio-medical sciences, Physical Sciences, Chemical Sciences etc.
* Can go to higher studies like M.Sc, M.Phil. after post graduation they are eligible for lectureship.
* Some other employment areas;

1. Hospitals
2. Research Centres
3. DNA Forensic Departments
4. Animal Breeding Industry
5. Consultancies
6. Biotechnology Industries
7. Food Processing Industries
8. Healthcare centres
9. Agricultural Firms
10. Pharmaceutical Firms/industries
11. Genetic Testing labs
12. Diagnostic Centres
13. Colleges/Universities

**Jobs Available**

* Consultant
* Genetic Lab Technician
* Regulatory Process manager
* Data Specialist
* Animal Breeder
* Forensic Scientist
* Bio-technician
* Clinical Researcher
* Genetic Laboratory Research Technician
* Genetic clinical Scientist

**3.19 B.Sc. Home Science**

**Introduction**

Home science is not only a science, it is also an atr form which draws and synthesizes the knowledge, concepts, and theories from arts, science and humanities. It is th art of managing resources efficiently and the science of improving home life, family life and intellectual thinking.

There is only a marginal difference between BA Home Science and B.Sc. Home Science. The difference lies in matter of certain topics being covered and the fact that the B.Sc. Home Science requires the study of physics, Chemistry, Biology and Mathematics in 10+2

* Generally the course is undertaken by girl students, but there is no restriction for boys as such.
* After completing the BA or B.Sc. in Home Science, one can pursue the masters in the subject.

**Specialization**

There are five major components or areas of specialization in Home Science

* Food and Resource
* Fabric and Human Communication
* Nutrition Management
* Apparel Science Development, and
* Extension Today

Home Science is so advanced that each specialization is a domain in its own with its areas of specialization and Vocational/professional opportunities. Some of the areas of further specialization are as follows.

**Main Branch**

**Food and nutrition**

* Food science
* Clinical and community nutrition
* Institutional food service

**Home Science in daily life**

* Fabric and Apparel
* Clothing construction science
* Textile Science
* Textile designing
* Garment designing
* Care and maintenance of clothes
* resource management
* interior decoration
* consumer Education
* child welfare
* Adolescent marriage and family guidance
* Care of the elderly
* Care of special children
* Program planning and evaluation
* Training and capacity building
* Management of community service organization. A number of opportunities are available in private industry and Government and social sector, personal requirement of special children and elderly where one can find jobs and satisfaction.

**3.20 B.Sc. Horticulture.**

**Introduction**

* It is a UG Program that will help one build a career in Agriculture/Plantation/Management/research and Development sector
* Students who have an interest in plant cultivation, research in the field of plant genetics and outdoor work may pursue this course.
* Job opportunities available in Govt. and Private sectors especially after PG.
* One has a good chance to build a rewarding career in the R & D sector.
* It is all about cultivation of plants, starting from seed related study to scientific study of cultivation, genetics of plants, plant diseases etc.
* In short it is all about the application of scientific knowledge in plant cultivation and thus increase productivity and yield.
* For achieving the said goal of improved productivity, this branch makes use of concepts of Biology, Bio-chemistry, Genetic Engineering etc.
* Apart from the theoretical subjects and practical sessions, hands on industrial and field training programs also form an integral part of B.Sc. Horticulture program.

**Courses**

UG & PG course and Advanced Ph.D. in the subject

**Job opportunities in Govt. Sector**

* Office level posts
* State wise Agriculture Department
* State wise forestry Departments
* Spice/coir/rubber Boards etc

**Job opportunities in private Sector**

* Private Plantation
* Agricultural Machinery and equipment manufacturing firms
* Ornamental Plants and flowers business
* Food production and technology Industry

**B.Sc. Agriculture or B.Sc. Horticulture, Which is better?**

* B.Sc. Agriculture is more demanding than B.Sc. Horticulture
* Horticulture is a part of Agriculture

**3.21 B.Sc. Industrial Chemistry.**

**Introduction**

* It is the branch of chemistry which applies physical physical and chemical processes towards the transformation of raw materials into products that are of benefit to humanity.
* It provides a broad education within chemistry with application of mathematical, engineering and management principles.

**Scope of the subject**

* If the course is studied with a reconised university, the chances of getting good position are very high.
* Options are available for an Industrial job or research field.
* In Industrial side you can select the manufacturing, production or development units.
* If you opt for higher education option for research is available.
* After research, you can join a laboratory or a research unit.
* MBA is another option to choose.
* It has huge application in various fields like pharmaceutical companies, polymer processes, petro-chemical industries and now a days it is very much useful in food and beverage industry.

**Courses**

* UG, PG and Ph.D.

**Colleges**

**3.22 B.Sc. Medical Imaging technology**

**Introduction**

* It is a 3-year degree course.
* The discipline involves the techniques and processes employed in creating images of human body parts for clinical purposes or in medical science.

**Eligibility**

* 10+2 science (PCB)

**Fees for the Course**

* Rs. 2 to 5 lacs

**Salary**

* Rs. 3 to 10 lacs

**Colleges**

* Institute of Public Health & hygiene, 011-26782850-54
* Jamia Hamdard
* Government Medical College, Amritsar
* Ansal university, Gurgaon
* Amity Institute, Noisa
* Sharda University, Greater Noida.
* Pandit Bhagwat Dayal Sharma University of Health Sciences

**3.23 B.Sc. Medical lab technology,**

**Introduction**

* It is allied health specialty program concerned with the diagnosis, treatment and prevention of diseases through the use of clinical laboratory tests.
* Professionals play a critical role in collecting the information needed to give the best care to an ill or injured patient.
* Medical practice is literally not possible without the test performed in the laboratory.

**Employment opportunities**

* Medical lab professional have a no. of choices of practice settings, such as hospitals, clinics, nursing homes, public health facilities, commercial laboratories etc.
* In these settings, communication and research skills are highly valued.

**Average course fee**

* Rs. 10,000 to 4 lacs

**3.24 B.Sc. Microbiology**

**Introduction**

* Microbiology is the study of microorganisms, which are microscopic, unicellular, and cell-cluster.
* This includes eukaryotes such as fungi and protists and prokaryotes
* Viruses and prions though not classified as living organisms are also studied in Microbiology.
* It typically includes the study of the immune system or immunology

**Employment Areas**

* Colleges, Universities
* Development laboratories
* Hospital pharmaceutical Sector
* Food Industry
* Beverage units
* Chemical industries

**Job Types**

* Bacteriologist, Industrial Microbiologist, Virologist , Mycologist , Biochemist, Proto Zoologist, Geneticist

**Colleges**

* Institute of genetic Engineering, Kolkata
* DU colleges
* St. Xavier’s college, Kolkata

**3.25 B.Sc. Medical Record Technologies**

**Introduction**

* This course plays a key role in maintain the patients records and to promote research of quality in the financial interests of the patient of the hospital with an excellent statistical reporting system.
* Students learn about billing and how to use medical office software.
* Aspiring medical record technicians enroll in this program learn to operate and manage the newest electronic record system being used by healthcare facilities.
* In addition to this they learn old fashion filing, record retrieval etc.

**Eligibility**

**Who is suitable for the course**

* Students who want to go for further higher degree courses such as Masters, M.Phil. and Ph.D. are suitable for this course.
* Candidate should be a hard worker, can work hours in the lab, and should have a team spirit.

**Skills Required**

* Attentive towards the people.
* Can understand the written sentences.
* Should manage his own time and others time as well.
* They should convey information effectively.
* Computer skills.

**Job Prospects**, Excellent, there is a great demand for experienced MRT.

**Institutions/colleges/universities**

* Chennai Medical College Hospital & Research Institute, SRM University
* Hamdard Institute of Medical Science.
* All India Institute of Medical sciences (AIIMS), New Delhi.

1. **SCIENCE**

**3. SCIENCE**

* Science is an important part of the foundation for education for all children.
* Science allows students to explore their world and discover new things.
* Science is the most important subject students study, because it gives them critical thinking skills they need in every subject.
* Science is a way of helping the brain grows in finding new knowledge.
* Science is important because it influences most aspects of everyday life including food, energy, medicine, transportation and many more activities.
* Science improves human life at every level, from individual comfort to global issues’
* Science knowledge allows us to develop new technologies, solve political problems and make informal decisions—both individually and collectively.
* One goal of science iss to provide natural explanations for events in the natural world.
* With science a student improves his education and communication.
* Technology is the practical science, with the use of it one can make his daily work easier.
* A school is not supposed to be a complete academic institution without science stream.
* Science is the most sought after stream among students at the 10+2 level. All CBSE schools across the country provide students with the option of choosing Science after class 10.
* Teaching the scientific method to students is teaching them how to think, learn, solve problems and make informed decisions.
* These skills are integral to every aspect of student’s education and life from school to career.
* The process and ideas of science are of great importance to everybody in three ways. The first is in their personal lives, for example, they can validly identify the components of a healthy life style.
* The second is in their civic lives, so that they take an informed part in social decisions, for example, on future options for electricity supply.
* The third is in their economic lives, where they need to be able to respond positively to change in the science-related aspects of their employment.
* If the major purpose of science education is to increase the flow of specialist scientists, technologists and engineers, then young people with special talents in science should be identified as early as possible and provided with a separate, specialized and highly focused science education.

**3.1 BACHELOR OF SCIENCE (B.Sc.)**

**Introduction**

It is a graduate level course in science related subjects. Students can choose between B.Sc. general and B.Sc. (Hon). Those interested in the field of computers and information and technology can opt fof B.Sc. (computer science/IT). The traditional B.Sc. course includes subjects like PCM (Physics, Chemistry, and Mathematics) and PCB (Physics, Chemistry and Biology). It includes the study of Organic Chemistry, Bio-Physical chemistry, Human Physiology, Micro-biology, Basic Immunology, Enzymes, Virology etc.

**Eligibility**

10+2, admission in Du is exclusively on the basis of merit,

Other Universities do conduct entrance test

**Courses**

B.sc with PCM and PCB

**3.2 B. Sc. (Hon) Physics**

**Introduction**

it is an undergraduate degree. The time period is 3 years, same as in B.Sc. general. B.Sc. Hons is considered to be superior as compared to the B.Sc. general course. It is also considered that getting a job with B.Sc. Hon is easier than getting a placement with B.Sc. general.

**Eligibility**

12+2

**Institutions/colleges/universities**

* Colleges of DU
* JMI
* AMU
* Certain other private colleges.

**3.3 B.Sc. (Hon) Chemistry**

**Introduction**

It is an undergraduate course which deals with the science of matter and the changes it undergoes. The science of matter is also addressed by Physics, but while Physics takes a more general and fundamental approach, Chemistry is more specialized, being concerned with the composition, behavior, structure and properties of matter as well as the changes of it under-goes during the chemical reactions. B.Sc. Chemistry is physical science course which studies various substances, atoms, molecules, crystals, and other aggregates of matter whether in solution or combination, and which incorporates the concepts of energy and entropy in relation to the spontaneity of chemical processes. B.Sc. in Chemistry is of 3-years duration course six semesters.

**Eligibility**

10+2 with PCM or PCB

**Courses**

B.Sc. Hon, M.Sc.

**Institutions/colleges/universities**

* DU
* JMI
* AMU
* And other private colleges.

**3.4 B.Sc. Bio-chemistry**

**Introduction**

* Bio-chemistry is an under graduate 3-year degree course.
* It is the study of chemical process in living organisms.
* It includes the study of Bio-organic chemistry. Bio-physical chemistry, Human Physiology, Micro-biology and virology, Basic Immunology, Enzymes etc.
* It also includes the study of structure and functions of cellular components such as proteins, carbohydrates, lipids, nucleic acids and other bio-molecules involved in biological processes such as growth, metabolism, reproduction, heredity etc. as well as the effect of the environment on living organisms. In other words B.Sc. Bio-chemistry course covers study of the minutest characteristics of organisms and their biological processes.
* It is a career originating course that opens many bright job prospects.

**Eligibility**

10+2 with PCB

Some reputed colleges do conduct entrance examination to get to the course. Selection in these colleges is based on marks secured in the final merit i.e. total marks aggregated in the final exams of 10+2 and the entrance exam.

**Courses**

B.Sc. Hon, M.Sc.

**Institutions/colleges/universities**

* DU
* JMI
* AMU
* And other private colleges.
  1. **B. Sc. Mathematics (Hon)**

**Introduction**

Mathematics is the science that deals with the logic of shape, quantity and arrangement. Math is all around us, in everything we do. It is the building block for everything in our daily lives, including mobile devices, architecture (ancient and modern), art, money, engineering and even sports. The word comes from the Greek word ‘mathema’ meaning science, knowledge or learning and is sometimes abbreviated to **maths** in England, Australia, New Zealand or **math** in USA and Canada.

* Mathematics is useful for solving problems that occur in the real world, so many people beside mathematicians study and use mathematics.
* Some knowledge of math is required in almost all the jobs.
* People working in business, science, engineering and construction need some knowledge of mathematics.

**Areas of study in mathematics**

* **Number:** it includes the study of numbers and quantities
* **Structure:** many areas of mathematics study the structure that an object has.
* **Change:** some areas of mathematics study the way things change. Most of these areas are part of the study of analysis.

**Applied mathematics**

1. Mathematical finance
2. Banking
3. Insurance companies
4. Software companies
5. Game applications
6. Management firms.

**Eligibility**

* 10+2 with Mathematics as one of the subjects.
* Admission in DU Colleges strictly on merit
* Cut off percentage remains about 98.

**Courses**

* B.Sc. Hon, M.Sc., M.Phil., Ph.D

**Institutes/colleges/universities**

* Christ University, Bangalore
* Fergusson College, Pune
* Oxford College of Science
* Mount Carmel College, Bangalore
* St. Joseph College, Kalicut
* University of Lucknow
* Ranchi University
* Jamia Hamdard, Delhi
* University of Delhi
* JMI
* AMU
* And many other colleges.

**7 countries that have smart mathematics students**

1. Singapore
2. Australia
3. Russia
4. Iran
5. Japan
6. China
7. India.

**3.6 B.Sc. (Hon) Statistics**

**Introduction**

It focuses on the collection, meaningful segregation and interpretation of collected data. The curriculum is designed to teach students subjects like probability and permutation. After graduation one can pursue courses like actuarial science. It is a 3-year degree course. Graduating in Statistics opens up a variety of career opportunities for students

**Eligibility**

10+2 with Math as one of the subjects

**Job opportunities**

* One can become a business analyst
* Statistician are also required in government sector to work on studies and research on consumer prices, fluctuations in the economy, employment patterns, population trends etc.
* Opportunities are also available in private sector in marketing insurance and Information and Technology.

**Courses**

B.Sc. M.Sc.

**Colleges/universities**

* IIT Delhi.
* International management Institute, Delhi,
* Entrepreneurship Education, Mumbai.
* Narsee Monjee Institute of Management Studies, Mumbai.
* Vishwakarma University, Pune.

**Average fee**

* Rs. 50,000 per year.

**After UG**

* M.Sc. Actuarial science
* M.Sc. in Library and information science.
* M.Sc.in Quantitative Economics.
* MCA.
* MBA.
* P.G. Diploma in statistics.

**3.7 B.Sc. (Hon) Botany**

**Introduction**

* it is a 3-year undergraduate course which can be pursued by aspirants who have completed their 12th class with good marks. This course deals with the study of general aspects concerning plant life. Aspirants who successfully complete this course will have a promising career ahead.
* B.Sc. Botany graduates have numerous higher study options available.
* These graduates can do numerous certifications as well.
* They can work in several job profiles

**Eligibility**

10+2 with PCB

**Jobs available**

After PG level there are plenty of jobs are in waiting.

* Teacher in schools and olleges
* Farming Consultant
* Environmental Consultancies
* Plant Pathologies
* Molecular Biologist
* Nursery Manager
* Ecologist
* Plant Explorer

**Institutions/colleges/universities**

* DU colleges, admission strictly on merit
* JMI
* AMU
* CCSU
* Many other private colleges

**3.8 B.Sc. (Hon) Zoology**

**Introduction**

it is an undergraduate degree course. The branch of Biology relates to the animal kingdom, including the structure, embryology, evolution, classification, habits, and distribution of all animals, both living and extinct.

Zoology graduates can expect a bright future ahead. The course is career oriented in nature that opens many job opportunities for the graduates.

**Eligibility**

10+2 in PCB

**Courses**

B.Sc. Hon. , M.Sc. , Ph.D.

**Institutions/colleges/universities**

* DU colleges, admission strictly on merit
* JMI
* AMU
* CCSU
* Many other private colleges

**3.9 B.Sc. (Hon) Geology**

**Introduction**

* Geology is the science that comprises the study of the solid earth and the process by which it is shaped and changed.
* Geology provides primary evidence primary evidence for plate tectonics, the history of life and evolution and paste climates.
* In modern times geology is commercially important for mineral and hydrocarbon exploration and for evaluating water resources
* Important for the prediction and understanding of natural hazards. The remedial of environmental problems and providing insight into paste climate changes
* It plays an important role in geotechnical engineering
* It is a major academic discipline.

**Eligibility**

* 10+2 with science

**Courses**

* B.Sc., M.Sc. M.Phil., Ph.D.

**Employment areas**

* Teacher in school, college and university
* Oil companies
* Research labs.
* Content writing (geology)

**Institutes/Colleges/universities**

* AMU
* Maharishi Dayanand University, Delhi Road, Rohtak

**3.10 B.Sc. (Hon) Agriculture**

**Introduction**

* The B.Sc. (Ag) degree differs from a B.Sc. degree
* Students use to study *Agricultural economics* rather than economics. Like engineering or forestry
* Agricultural science courses are infused with practicality
* It requires specialization for example, majoring in animal science, plant protection, soil science or agricultural engineering

**Eligibility**

* 10+2with science (PCB/PCM)

**Duration of the course:** 4-years

**Colleges**

* India has one of the largest agricultural education system with 42 states Agricultural Universities (SAUs)
* 3 Central universities (CAUs) viz. Imphal, Pusa and Jhansi

The curriculum is very broad and inter-disciplinary consisting of courses in

1. Agronomy,
2. Agricultural Micro-biology,
3. Horticulture,
4. Plant pathology,
5. Entomology
6. Agricultural Economics
7. Extension Education
8. Genetics and Plant Breeding
9. Soil Science
10. Soil Microbiology
11. Food Technology
12. Food Microbiology
13. Food Safety and Standards
14. Animal Husbandry

apart from supporting courses in Basic Science, Humanities and Agricultural Engineering.

* The program also includes a compulsory one semester internship (Rural Agricultural Work Experience,
* Most of the courses are infused with Practicality with emphasis on “hands on’ experience and ‘learning by doing’
* Prior to 1998, the B.Sc. (Ag) degree was known as B.Sc (Ag and AH) (AH= Animal Husbandry) and evaluation was on 5-point scale
* Since 1998, it has been designated as B.Sc. (Ag) and AH part has been transferred to BVSc (Bachelor of veterinary Science), which is now designated as BVSc & AH. However, B.Sc. (Ag) still retains courses in Animal Husbandry and nutrition.
* In 2006 ICAR has recommended to redesign B.Sc. (Ag) as B.Sc. Hon (Ag)
* Like BE/B.Tech, MBBS, or BVSc & AH. B.Sc. (Ag) is considered as a professional degree by Government of India.
* In recognition of its 4-year duration B.Sc. (Ag) holders are given some benefits

**3.11 B.Sc. Anthropology**

**Introduction**

* Anthropology is the scientific study of humans, human behavior and societies in the past and present.
* Social Anthropology studies patterns of behavior,
* Cultural Anthropology studies the cultural meaning including norms and values.
* Linguistic Anthropology studies how language influences social life.
* *It ia the study of what makes us human,*
* It takes a broad approach to understanding so many different aspects of human experience , which we call holism.
* Anthropology consider the past through Archeology to see how human groups lived hundreds or thousands years ago and what was important to them.

**Eligibility**

* 10+2 in Science for B.Sc.

**Courses**

* B.Sc. Anthropology, M.Sc., Ph.D

**Institutions/colleges/universities**

* DU
* AMU
* Assam University
* Dibrugarh University
* Lucknow University

**Employability**

* M.Sc. for getting a Job
* Ph.D. for work as an advisor for any International agency

**3.12 B.Sc. in Audiology**

**Introduction**

* It is the undergraduate course in the science that explores hearing, balance, and related disorders. Practitioners of this science who treat those with hearing loss and proactively prevent related damage are Audiologists.
* The course is also available in the online mode.
* Audiology is a specialized field of study’
* The program is designed to train students in the techniques that are required for communications with patients who have impaired hearing and other related sensory disorders.

**Job opportunities**

* Administering auditory tests for babies, children and adults.
* Interpreting and reporting on test results.
* Developing and improving test techniques
* Communicating with a wide variety of patients

**Eligibility**

* 10+2 with Science stream

**Course**

* Audiology

**Institutions/colleges/universities**

* AIIMS, Delhi
* University college of Medical Science, Delhi
* Pt. Bhagwat Dayal Sharma Medical College, Rohtak
* Hamdard Institute of Medical Science and Research, Delhi
* Jamia Hamdard University, Delhi
* Amity University, NOIDA

**3.13 B.Sc. (Hon) Bio-informatics.**

**Introduction**

* Bioinformatics is the application of statistics and computer science to the field of molecular Biology
* The primary goal of Bioinformatics is to increase the understanding of Biological processes, however its focus is on developing and applying computationally intensive techniques e.g. pattern recognition, data mining, machine learning, algorithms, and visualization to achieve this goal. Major research efforts in the field include sequence alignment, gene finding, genome assembly,, drug design, drug discovery, protein structure alignment, protein structure prediction, prediction of gene expression and protein-protein interactions, genome-wide association studies and the modeling of evolution.

**Eligibility**

* 10+2 with science stream.

**Courses**

* B.Sc. Bioinformatics
* BE Bioinformatics,
* B.Sc. + M.Sc. integrated Bioinformatics
* B.Tech Bioinformatics
* MBA Bioinformatics
* M.S. Bioinformatics
* M.Sc. Bioinformatics and Biotechnology
* M.Tech. Bioinformatics

**Institutions/colleges/universities**

* 1. **B.Sc. Cardiac Care Technology**

**Introduction**

It is a 3-year full-time under graduate course divided into 6 semesters. It is an allied course in medicine. Cardiac technologists assist physicians during invasive cardio-vascular testing. A tube is inserted into one of the blood-vessels that carry blood into the heart.

The job of a technician is to perform tasks that require less medical training before and during the procedure, so doctors can focus on the results of the test.

A patient’s life may depend on the efficiency Cardiac care technologists.

**Eligibility**

10+2 in science (PCB) from any recognized educational board. Minimum aggregate 50% marks.

**Course**

B.Sc. cardiac care technology

**Admission process**

Entrance test. Counseling after qualifying the entrance examination.

**Recruiting areas:** Private clinics, hospital administration, research and medical colleges etc.

**Job avenues**

* Cardiovascular technologist Rs. 6,68,000/per year.
* Medical sonographer, Rs. 7,00,000/year.
* Cardiologist, Rs. 16,00,000/year.

**Institutions/Colleges/university**

* Rajiv Gandhi Para medical Institute, Delhi, 10,000.
* Christian medical college, Vellore, (Fee- I,13,000 per year).
* Geetanjali University, Udaipur, (70,000 per year).

**3.15 B.Sc. Fisheries Science (B.F.Sc)**

**Introduction**

* Fisheries Science is the academic Discipline of Managing and understanding Fisheries
* It is multidisciplinary science, which draws on the disciplines of aquaculture including breeding, genetics, biotechnology, nutrition, farming, diagnoses of diseases in fishes, other aquatic resources, medical treatment of aquatic animals, fish processing including curing, canning, freezing, value addition, byproducts and waste utilization, quality assurance and certification, fisheries microbiology, fisheries biochemistry,
* Fisheries resource management including biology, anatomy, taxonomy, physiology, population dynamics, fisheries environment including oceanography, limnology, ecology, biodiversity, aquatic pollution.
* Fishing technology including gear and craft engineering, navigation and seamanship, marine engines, fisheries economics and management and fisheries extension.

**Duration**

* Fisheries science is generally **4-year** course typically taught in a university setting, and can be the focus of an undergraduate, postgraduate or Ph.D program

**Eligibility**

* 10+2 in science stream (PCB)

**Institutes**

* Central Institute of Fisheries Education
* CIFE
* CENTRAL Institute of Fisheries Education, Versova, Mumbai.
* Central Institute of Fresh water Aquaculture, Orissa
* Central marine Fisheries Research Institute, Kerala
* National Institute of Oceanography, Dona Paula, Goa.
* IIT, West Bengal
* Central Institute of Food technology, Kerala
* National Bureau of Fish Genetic Resources, Lucknow

**Career growth in Fisheries**

* Own business
* Assistant Fisheries Development Officer.
* Fisheries Extension Officer
* District Fisheries Development Officer

**Central government**

* Marine Product Export Development Authority
* FAO
* NACA
* Fisheries Survey of India
* NIO
* NABARD
* WHO
* EIA
* Academic Institutes (can apply as a research Assistant)
* Bio-chemist
* Asst. Professor (with M.F.Sc.degree) in faculty of Fisheries.

**National Banks**

* Field Officer or even Manager in Agriculture Loan Section

**Private Sector**

* Sea food Processing and Export Industry
* Fishing Gear Industry
* Aqua Feed Plant
* Pharmaceutical Companies
* In the area of Designing, Construction, management of fish-farm and hatcheries

**Foreign Jobs**

* Job opportunities in Australia, Japan, USA, Canada, china and European Countries. Gulf and many African Countries

***Deep sea Exploration for those who are interested in it***

**3.16 B. Sc. Forensic science**

**Introduction**

* It is a 3-year graduation course which involves the application of scientific knowledge to the investigation of crimes. Professionals in this discipline apply their knowledge of science to analyze the evidence found at a crime scene.
* An analysis could involve anything from an object at the crime scene, to soil, blood stains, saliva, body fluids, bones, finger prints, DNA profiling, recovering data from computers, researching new technologies etc.
* Its syllabus includes essential components such as Forensic Pathology, Psychiatry, Psychology, Forensic medicine and Odontology (Dentistry)

**Eligibility**

10+2 with science stream

**Courses**

Diploma in Forensic science and criminology,

Diploma in Forensic science and law

Graduation and PG

**Institutions/colleges/universities**

* Sharda University, Greater Noida
* Lovely Professional University, Jalandhar
* University of Mumbai

**3.17 B.Sc. Forestry**

* It provides the students with the knowledge and training about forestry
* It trains the students about the knowledge and training about Forestry.
* Forestry program trains students in managing of forests, new plantation, maintaining old plantations and other natural resources.
* The main aim of forestry studies is the creation and implementation of systems and framework for sustainable continuation of forest resources and supplies and to make sure that non-renewable resources do not get extinct.
* During the program, students are offered theoretical and practical knowledge regarding forestry and other related fields.
* Forestry professionals have various duties to perform such as managing forests and forest supplies, generating awareness and implementing new technologies in the forestry department.
* Candidates who are keen to take up a career in forestry must have a spirit of adventure, enthusiasm for outdoor activities, physical fitness and should be adaptable to the new surroundings.
* They also should have a keen interest in global concerns and how to preserve the environment.

**Duration of the course**

* 4 yers.

**Fee**

* 30,000/year

**Eligibility**

* 10+2 in any stream with minimum 50% marks.

**Courses**

* UG, PG and Ph.D.

**Career options nd Job Prospects**

* Students, after pursuing B.Sc. in Forestry can find work, both in public and private sectors.
* They can work with Indian Council of Forestry Research and Education and various affiliated Forestry Research Institutes such as Institute of Social Forestry, Eco-rehabilitation, Forest Research Institute etc.

**Popular Forestry Employment Areas**

* Indian Council of Forestry Research and Education
* Forest Departments
* Zoological Parks
* Horticulture Departments
* Wildlife Research Institute
* Wildlife Department
* National Parks and Sanctuaries
* Wildlife Ranges
* Forest Nurseries
* Colleges and universities

**Listed below are suitable jobs**

* Assistant Manager
* Farming Manager
* School teacher
* Agri-Credit Manager
* Nursing Manager

**Institutes/colleges/universities**.

* Doon School Group.
* Vishwakarma University, pune.

**3.18 B.Sc. Genetics.**

**Introduction**

* Genetics is a branch of biology that covers all the branches under **genes,** variations and heredity and evolution in all the living organisms.
* Students are offered in-depth knowledge about how genetic traits are passed down from one generation to another
* The course includes topics from the subjects like Bio-chemistry, Genetic Engineering, Model Organisms, Microbiology, Cloning etc.
* Students who want to pursue Genetics must have a keen interest and an in-depth knowledge of medical genetics and cloning.
* They are also required to have an understanding of both old and new genetic theories.
* It is becoming a widely popular course among students these days, because of the new techniques and technological advancement in the field of genetics and life sciences have led to various new discoveries in the respective fields.

**Eligibility**

10+2 in Science

**Duration of Course:** 3 years

**Courses**

UG, PG and Research

**Job prospects**

* It opens career opportunities in various fields such as genetics, Material science, life sciences, bio-technology, Bio-medical sciences, Physical Sciences, Chemical Sciences etc.
* Can go to higher studies like M.Sc, M.Phil. after post graduation they are eligible for lectureship.
* Some other employment areas;

1. Hospitals
2. Research Centres
3. DNA Forensic Departments
4. Animal Breeding Industry
5. Consultancies
6. Biotechnology Industries
7. Food Processing Industries
8. Healthcare centres
9. Agricultural Firms
10. Pharmaceutical Firms/industries
11. Genetic Testing labs
12. Diagnostic Centres
13. Colleges/Universities

**Jobs Available**

* Consultant
* Genetic Lab Technician
* Regulatory Process manager
* Data Specialist
* Animal Breeder
* Forensic Scientist
* Bio-technician
* Clinical Researcher
* Genetic Laboratory Research Technician
* Genetic clinical Scientist

**3.19 B.Sc. Home Science**

**Introduction**

Home science is not only a science, it is also an atr form which draws and synthesizes the knowledge, concepts, and theories from arts, science and humanities. It is th art of managing resources efficiently and the science of improving home life, family life and intellectual thinking.

There is only a marginal difference between BA Home Science and B.Sc. Home Science. The difference lies in matter of certain topics being covered and the fact that the B.Sc. Home Science requires the study of physics, Chemistry, Biology and Mathematics in 10+2

**Eligibility**

10+2 in any stream for BA Home Science

10+2 with science subjects for B.Sc. Home Science

**Courses**

BA and B.Sc.

**Institutions/colleges/universities**

Different Colleges of DU

JMI

AMU, Aligarh

* Generally the course is undertaken by girl students, but there is no restriction for boys as such.
* After completing the BA or B.Sc. in Home Science, one can pursue the masters in the subject.

**Specialization**

There are five major components or areas of specialization in Home Science

* Food and Resource
* Fabric and Human Communication
* Nutrition Management
* Apparel Science Development, and
* Extension Today

Home Science is so advanced that each specialization is a domain in its own with its areas of specialization and Vocational/professional opportunities. Some of the areas of further specialization are as follows.

**Main Branch**

**Food and nutrition**

* Food science
* Clinical and community nutrition
* Institutional food service

**Home Science in daily life**

* Fabric and Apparel
* Clothing construction science
* Textile Science
* Textile designing
* Garment designing
* Care and maintenance of clothes
* resource management
* interior decoration
* consumer Education
* child welfare
* Adolescent marriage and family guidance
* Care of the elderly
* Care of special children
* Program planning and evaluation
* Training and capacity building
* Management of community service organization

A number of opportunities are available in private industry and Government and social sector, personal requirement of special children and elderly where one can find jobs and satisfaction.

**3.20 B.Sc. Horticulture.**

**Introduction**

* It is a UG Program that will help one build a career in Agriculture/Plantation/Management/research and Development sector
* Students who have an interest in plant cultivation, research in the field of plant genetics and outdoor work may pursue this course.
* Job opportunities available in Govt. and Private sectors especially after PG.
* One has a good chance to build a rewarding career in the R & D sector.
* It is all about cultivation of plants, starting from seed related study to scientific study of cultivation, genetics of plants, plant diseases etc.
* In short it is all about the application of scientific knowledge in plant cultivation and thus increase productivity and yield.
* For achieving the said goal of improved productivity, this branch makes use of concepts of Biology, Bio-chemistry, Genetic Engineering etc.
* Apart from the theoretical subjects and practical sessions, hands on industrial and field training programs also form an integral part of B.Sc. Horticulture program.

**Eligibility**

10+2 in science stream (PCB)

Register for state level entrance test

**Courses**

UG & PG course and Advanced Ph.D. in the subject

**Job opportunities in Govt. Sector**

* Office level posts
* State wise Agriculture Department
* State wise forestry Departments
* Spice/coir/rubber Boards etc

**Job opportunities in private Sector**

* Private Plantation
* Agricultural Machinery and equipment manufacturing firms
* Ornamental Plants and flowers business
* Food production and technology Industry

**B.Sc. Agriculture or B.Sc. Horticulture, Which is better?**

* B.Sc. Agriculture is more demanding than B.Sc. Horticulture
* Horticulture is a part of Agriculture

**3.21 B.Sc. Industrial Chemistry.**

**Introduction**

* It is the branch of chemistry which applies physical physical and chemical processes towards the transformation of raw materials into products that are of benefit to humanity.
* It provides a broad education within chemistry with application of mathematical, engineering and management principles.

**Eligibility**

* 10+2 science

**Scope of the subject**

* If the course is studied with a reconised university, the chances of getting good position are very high.
* Options are available for an Industrial job or research field.
* In Industrial side you can select the manufacturing, production or development units.
* If you opt for higher education option for research is available.
* After research, you can join a laboratory or a research unit.
* MBA is another option to choose.
* It has huge application in various fields like pharmaceutical companies, polymer processes, petro-chemical industries and now a days it is very much useful in food and beverage industry.

**Courses**

* UG, PG and Ph.D.

**Colleges**

* DU Colleges
* AMU
* University of Kalicut

**3.22 B.Sc. Medical Imaging technology**

**Introduction**

* It is a 3-year degree course.
* The discipline involves the techniques and processes employed in creating images of human body parts for clinical purposes or in medical science.

**Eligibility**

* 10+2 science (PCB)

**Fees for the Course**

* Rs. 2 to 5 lacs

**Salary**

* Rs. 3 to 10 lacs

**Colleges**

* Institute of Public Health & hygiene, 011-26782850-54
* Jamia Hamdard
* Government Medical College, Amritsar
* Ansal university, Gurgaon
* Amity Institute, Noisa
* Sharda University, Greater Noida.
* Pandit Bhagwat Dayal Sharma University of Health Sciences

**3.23 B.Sc. Medical lab technology,**

**Introduction**

* It is allied health specialty program concerned with the diagnosis, treatment and prevention of diseases through the use of clinical laboratory tests.
* Professionals play a critical role in collecting the information needed to give the best care to an ill or injured patient.
* Medical practice is literally not possible without the test performed in the laboratory.

**Eligibility**

* 10+2 (Science- PCB)

**Courses**

* UG and PG courses’

**Employment opportunities**

* Medical lab professional have a no. of choices of practice settings, such as hospitals, clinics, nursing homes, public health facilities, commercial laboratories etc.
* In these settings, communication and research skills are highly valued.

**Average course fee**

* Rs. 10,000 to 4 lacs

**Colleges/institutes/universities**

**3.24 B.Sc. Microbiology**

**Introduction**

* Microbiology is the study of microorganisms, which are microscopic, unicellular, and cell-cluster.
* This includes eukaryotes such as fungi and protists and prokaryotes
* Viruses and prions though not classified as living organisms are also studied in Microbiology.
* It typically includes the study of the immune system or immunology

**Eligibility**

* 10+2 science (PCB)

**Duration**

* 3 years

**Courses**

* UG and PG (M.Sc.), M.Phil., Ph.D.

**Employment Areas**

* Colleges, Universities
* Development laboratories
* Hospital pharmaceutical Sector
* Food Industry
* Beverage units
* Chemical industries

**Job Types**

* Bacteriologist, Industrial Microbiologist, Virologist , Mycologist , Biochemist, Proto Zoologist, Geneticist

**Colleges**

* Institute of genetic Engineering, Kolkata
* DU colleges
* St. Xavier’s college, Kolkata

**3.25 B.Sc. Medical Record Technologies**

**Introduction**

* This course plays a key role in maintain the patients records and to promote research of quality in the financial interests of the patient of the hospital with an excellent statistical reporting system.
* Students learn about billing and how to use medical office software.
* Aspiring medical record technicians enroll in this program learn to operate and manage the newest electronic record system being used by healthcare facilities.
* In addition to this they learn old fashion filing, record retrieval etc.

**Eligibility**

* 10+2 in PCM, percentage of marks required—45 or 50

**Duration**

* 3-year degree course

**Who is suitable for the course**

* Students who want to go for further gigher degree courses such as Masters, M.Phil. and Ph.D. are suitable for this course.
* Candidate should be a hard worker, can work hours in the lab, and should have a team spirit.

**Skills Required**

* Attentive towards the people.
* Can understand the written sentences.
* Should manage his own time and others time as well.
* They should convey information effectively.
* Computer skills.

**Job Prospects**, Excellent, there is a great demand for experienced MRT.

**Institutions/colleges/universities**

* Chennai Medical College Hospital & Research Institute, SRM University
* Hamdard Institute of Medical Science.
* All India Institute of Medical sciences (AIIMS), New Delhi.

**3.26 B.Sc. (Hon.) Molecular Biology.**

**Introduction**

* It is the branch of Biology that deals with the molecular basis of biological activity.
* This field overlaps with other areas of Biology and Chemistry, particularly with Genetics and Biochemistry.
* Molecular-biology chiefly concerns itself with understanding and the interactions between the various systems of a cell, including interactions between different types of DNA, RNA and protein biosynthesis as well as learning how these interactions are regulated.

**Eligibility**

* 12+2 Science (PCB)

**Duration**

* 3 years

**Courses**

* Molecular Biology B.Sc. Hon.
* M.Sc. Hon Molecular biology and Biochemistry.
* M.Sc. Molecular Biology and genetic Engineering.
* M.Sc. Molecular Biology.
* M.Tech. Molecular Biology and human Genetics.
* M.Tech. molecular Medicines.
* Certificate course in Molecular and human Genetics

**Institutions/colleges/universities**

* DU
* JNU
* Indian Agriculture Research Institute, PUSA. (for M.Sc.)
* And many Institutes in other states.

**3.27 B.Sc. (Hon) Nanotechnology**

**Introduction**

* It is the study of manipulating matter on an atomic and molecular scale
* Generally nanotechnology deals with structures sized between one to hundred nanometers in at least one dimension within that size.
* Quantum mechanical effects are very important at this scale, which is in the quantum realm.
* Nanotechnology is very diverse, ranging from extensions of conventional device physics to completely new approaches based upon molecular self-assembly, from developing new materials with dimensions on the nano-scale to investigating whether we can directly control matter on the atomic scale.

**Eligibility**

* 10+2 science

**Courses**

* 1. B.Tech.—Electronics and Nanotechnology 2. B.Tech 3. MBA Nanotechnology 4. M.E.

5. M.Sc.—Nano Science & Technology 6. M.Sc Nanotechnology 7. M.Tech. Nano Science & Technology and many more.

**Employment Areas**

* Product Development
* Forensic Science
* Biotechnology
* Genetics
* Health industry
* Environmental Industry
* Space Research
* Agriculture
* Private Research Institutes

**Colleges/institutions/universities**

* S.N.R. Sons College, Coimbatore.
* Lovely professional University, Jalandhar.
* Institute of Management and Technical Studies, IMTS, Noida

**3.28 B.Sc. Neurophysio-Technology**

**Introduction**

* Neurophysio Technology is a discipline within Healthcare Science where healthcare Practitioners and Healthcare Scientists measure the functions of nervous system to ensure normalcy and help in the diagnosis and monitoring of the progress of Neurological disorders.
* Healthcare Practitioners and Healthcare Scientists perform a range of different tests in patients of all ages, all of which require a considerable amount of patient contact and also good communication skills, as each involves attaching electrodes to the patient and encouraging co-operation before the recordings can be made.
* Clinical Neurophysiology departments are usually based in hospitals and linked to neurological centres.
* Most investigations in Neurophysiology are recorded in dedicated environments, however they are also performed at the patient’s bed site, in intensive care units, and also in operation theatres.
* These studies measure the function of the peripheral nerves responsible for movement and sensation.
* The nerves are tested by applying a small electrical current to them and recording the response.
* These tests are performed by healthcare practitioner, healthcare scientists and also clinical Neurophysiologists.

**Eligibility**

* 10+2 science

**Admission:** through entrance exam.

**Institutions/colleges/universities.**

* AIIMS
* Sharda University, Greater NOIDA
* LLRM Medical College, Meerut
* Ansal University, Gurgaon.
* Pt. Bhagwat Dayal Sharma, PG Institute of Medical Sciences, Rohtak

**3.29 B.Sc. Nursing**

**Introduction**

* Bachelor of Science (Nursing) prepares nurses for a wide variety of professional roles and graduate study.
* Course work includes nursing science, research, leadership, and related sciences that inform the practice of nursing.
* It also provides the students with general education in math, humanities and social sciences.
* An undergraduate degree affords opportunities for greater career advancement and higher salary options.
* It is often a prerequisite for teaching, administrative, consulting and research role.

**Eligibility:** 10+2 Science

**Duration**: 3-year degree course

**3.30 B.Sc. Operation Theatre Technology**

**Introduction**

* B.Sc in **Operation Theatre Technology** is related to all the work and management of the **Operation Theatre** .
* The course prepares students for managing the patients as well as for monitoring ins and outs of an **operation Theatre.**
* During the study, students are responsible for looking after all the surgical instruments as well as their sterilization.
* Student assist the surgeon during operations and closely look after the drugs , anesthesia gases, drapes, and sterilization requirements during surgery.
* In addition minor tasks of arranging operation theatre table, anesthesia table and managing the staff prepare a professional Operation Theatre Technician.

**Eligibility**

* 10+2 Science at least 50% in E and PCB

**Duration of the course**

* Degree Course--4 years
* Diploma Course—2 years

**Career prospects**

* At the completion of the course, students are allowed to assist Doctors in Operation Theatre.

**Institutes/colleges/universities**

* RAMA University (Phone no. 1800 1020 449)
* Shivalik Institute of Paramedical Technology – SIPT, Chandigarh
* Institute of Paramedical Technology,, New Delhi
* Anand Institute of Medical Science, Ludhyana.
* SGT University, Gurgaon.
* Integral University, Lucknow
* National Institute of Management and Technology, Noida
* Bhagwant University, Ajmer
* AISECT University, Bhopal

**3.31 B.Sc. Optometry**

**Introduction**

* Optometry deals with vision which involves examining, diagnosing, managing and treating diseases of the eye. B.Sc. Optometry is a branch of medicine dealing with eye equipment which includes spectacles and contact lenses.
* It helps Optometrists to treat patients to improve their sight.
* Students studying in this course will be able to work as opticians, refractionists, optometrist and ophthalmic assistants and help people with eye problems.
* An Optometrist has to examine a patient for any sign of the disease that might might need medical attention.
* Optometrist treats patients for binocular vision, low vision and also for dyslexia.

**Eligibility**

* 10+2 science (PCB and PCM)

**Duration of course**

* 4 years

**Entrance Tests**

* EYECET
* AIIMS Exam
* JNU Entrance Exam.
* DU Entrance Exam and CMC.

**Institutes/colleges/universities**

* Ashray Institute of Paramedical Sciences, Delhi
* National Institute for Education and Research. Delhi
* Rajiv Gandhi Paramedical Institute, New Delhi

**3.32 B.Sc. Perfusion technology**

**Introduction**

* It is defined as those functions necessary for the support, treatment, measurement, or supplementation of the cardiopulmonary and circulatory system of a patient.
* The course involves the study of Physiology, Pathology and associated equipment used to support and/or assume the function the heart and/or lungs during medical procedures.
* The Perfusion Technologist prepare and operates the heart-lung machine and other sophisticated equipment as directed by healthcare physicians.
* The Perfusionist utilizes technology such as heart/lung machines, ventricular assist devices and artificial hearts, as well as pharmacological inventions to maintain the patient during the period of circulatory support.

**Courses**

* UG and PG, M.Phil. and Ph.D.

**Institutions/colleges/universities**

* Rajiv Gandhi University of Health Sciences, RGUSH, Bangalore
* JSS Academy of Higher Education and Research, Trissur.
* Frontier lifeline Hospital, Chennai.
* St. Johns Medical College, Bangalore.
* Pt. Bhagwat Dayal Sharma Postgraduate Institute of Medical Science, Rohtak
* Ansal University, Gurgaon

**3.33 B.Sc. Renal Dialysis Technology**

**Introduction**

* The course is designed to prepare students to administer haemodialysis treatments for patients with renal failure, under the supervision of a nurse or a physician.
* The course imparts essential instruction to enrolled students in basic anatomy and physiology, dialysis preparation, dialysis prescriptions interpretation, extracorporeal circuit , dialyzer set up and maintenance, patient preparation, equipment monitoring, vein puncture and local anaesthesia administration, taking vital signs, documentation and communication , safety and sanitation, emergency interventions and professional standards and ethics.
* It covers specialties like cardiac care technology, dialysis technology, respiratory care technology, dialysis technology, imaging sciences technology, clinical medical lab among others.
* Renal failure or kidney diseases, results in the accumulation of excess of wastes and fluids in the blood that Dialysis Technicians help remove through the operation of a Dialysis machine.
* Dialysis Technicians must have a thorough knowledge of how the dialysis machine functions and interacts with the human body.
* They are also responsible for cleaning and sterilizing the dialysis machine.

**Admission Process**

Counseling after taking entrance test or direct admission in some cases.

**Major Entrance Tests**

JEE Mains, BITSAT, COMEDK,SRMJEE, UPSEE

**Institutes/Colleges/universities**

* Rajiv Gandhi Paramedical Institute , New Delhi.
* Jamia Hamdard University
* Jawahar lal Nehru University

**3.34 Bachelor of Science (Post-basic) Nursing**

**Introduction**

* Post Basic B.Sc. Nursing Course prepares the Nurses for a wide variety of professional roles and graduate study.
* The aim of this program is to prepare graduates to assume responsibilities as professionals, competent nurses and midwives in providing promotive, preventive, curative and rehabilitative services, who can make independent decisions in nursing situations
* Protect the rights of individuals in pursuit of health.

**3.35 Diploma in General Nursing & midwifery (GNM-Nursing)**

**Introduction**

* Nursing is the art of taking care of sick people.
* Midwifery is a profession that provides assistance to a mother during labor and pregnancy.
* Subjects studied under this degree are biological Science, Psychology, Sociology, fundamentals of Nursing and First-aid.

**Duration:** Diploma (general Nursing & Midwifery) is a 3-year course.

**Institutions/Colleges/universities**

* Malwa College of Nursing, Kotkapura, Punjab
* AIIMS, Delhi
* AFMC, Pune.
* Govt. Medical College Amritsar.
* NIMS University, Jaipur.
* Pt. Bhagwat Dayal Sharma Postgraduate Institute of Medical Science. Rohtak
* Many more Colleges in different States

**3.36 Bachelor of Physiotherapy**

**Introduction**

* It is an Undergraduate course in the field of Medical Science’
* Physical Therapy Programs provide core skills like manual therapy, therapeutic exercise and the application of electro physical modalities, to the prospective students. The course focuses on the use of physical therapy, massages, physical movements and the exercise to improve and cure injuries, deformities and diseases.
* Physiotherapy doesn’t rely extensively on the use drugs and medicines. Instead, it relys on the physical treatment to improve the situation.

**Courses**

* UG and PG (in, Cardiopulmonary, Neurology, Orthopeadics, Sports, community Rehabilitation, Obstetrics & Gynecology, Neurology, Cardiology, )

**Duration**

4 years plus 6 months internship, i.e. 4 and a half year in total

**Employment Areas**

1. Educational Institutions. 2. Hospitals. 3. Health Institutions 4. Schools for the mentally retarded children. 5. Sports training facilities. 6. Orthopedic departments. 7. Fitness centres

**Job Profiles**

1. Lecturer. 2) Osteopath. 3) Physiotherapist. 4) Sports Physio Rehabilitator. 5) Therapy Manager

**Institutions/Colleges/Universities**

* Sri Guru Gobind Singh University
* Jamia Hamdard

**3.37 Bachelor of Computer Application**

**Introduction**

* It is a technical degree that prepares thee students for a career in the field of Computer Application and Software Development.
* This being a professional course, even non- math students can also opt for this course.
* The course gives an insight into the world of Computers world and its application

**Duration:** 3-years

**Courses**

UG, PG and Research, MBA in IT, M.Sc. IT.

**3.38 B. Pharmacy (B.Pharma)**

**Introduction**

1. The program covers all the facets of healthcare including bio-chemical areas that concerns the preparation of medicine in implementing those for the right diagnosis.
2. Students will learn about the medicines and their effects on human body with details of chemical and organic properties of all the elements used.
3. There are different specialization like pharmaceutical chemistry, pharmaceutics, pharmacology and pharmaceutical analysis.

**Courses**

1. UG, PG & Research

**Institutions/colleges/universities**

1. Admission through JEE/NEET

**B) Diploma in Pharmacy (D. Pharma)**

* 1. **Bachelor of Environmental Science (37)**

**Allied Sciences. (Subjects included in Allied Sciences are;)**

* **B.Sc. Anaesthesia Technology.**
* **B.Sc. Audiology & Speech Language Pathology (BASLP)**
* **B.Sc. Cardiac Perfusion Technology**
* **B.Sc. Cardio Vascular Technology**
* **B.Sc. Diabetes Sciences**
* **B.Sc. Dialysis Therapy**
* **B.Sc. Echocardiography**
* **B.Sc. Emergency Medical Technology**
* **B.Sc. Intensive care Technology**
* **B.Sc. Medical Lab Technology**
* **B.Sc. Medical Radiologic Technology**
* **B.Sc. Neuro Electro Physiology**
* **B.Sc. Operation Theatre Technology**
* **B.Sc. Optometry**
* **B.Sc. Physician Assistant**
* **B.Sc. Respiratory Therapy**

The course (BASLP) is approved by the Rehabilitation Council of India

***Courses listed above are totally job oriented Hospital based professional courses and will provide high openings in the area of allied health professions in health care industry to the students. There is a shortage of professionals in these fields and hence there is a great demand and scope for these courses***

* 1. **B.Sc. Anaesthesia Technology.**
  2. **B.Sc. Audiology & Speech Language Pathology (BASLP)**
  3. **B.Sc. Cardiac Perfusion Technology**
  4. **B.Sc. Cardio Vascular Technology**
  5. **B.Sc. Diabetes Sciences**
  6. **B.Sc. Dialysis Therapy**
  7. **B.Sc. Echocardiography**
  8. **B.Sc. Emergency Medical Technology**
  9. **B.Sc. Intensive care Technology**
  10. **B.Sc. Medical Lab Technology**
  11. **B. Sc. Medical Radiologic Technology**
  12. **B .Sc. Neuro Electro Physiology**
  13. **B.Sc. Operation Theatre Technology**
  14. **B.Sc. Optometry**
  15. **B.Sc. Physician Assistant**
  16. **B.Sc. Respiratory Therapy**
  17. **B.Sc. Agriculture**

**Agriculture (top 9 courses)**

* **B.Sc. Agriculture**
* **B.Sc. Bio-chemistry**
* **B.Sc. Biotechnology**
* **B.F.Sc. Fisheries Science**
* **B.Sc. Food Quality Assurance**
* **B.Sc. Forestry**
* **B.Sc. Horticulture**
* **B.Sc. Micro-biology**
* **BVSc. Veterinary Science**
  1. **B.Sc. Bio-chemistry**
  2. **B.Sc. Biotechnology**
  3. **B.F.Sc. Fisheries Science**
  4. **B.Sc. Food Quality Assurance**
  5. **B.Sc. Forestry**
  6. **B.Sc. Horticulture**
  7. **B.Sc. Micro-biology**
  8. **BVSc. Veterinary Science**

**OTHER SCIENCE OPTIONS**

**3.65 Diploma in General Nursing and Midwifery (GNM-Nursing)**

**Introduction**

* Nursing is the art of taking care of sick people.
* Midwifery is a profession that provides assistance to a mother during labor and pregnancy.
* Subjects studied under this degree are biological Science, Psychology, Sociology, fundamentals of Nursing and First-aid.

**Duration:** Diploma (general Nursing & Midwifery) is a 3-year course.

**Eligibility:** 10+2 Science

**Institutions/Colleges/universities**

* Malwa College of Nursing, Kotkapura, Punjab
* AIIMS, Delhi
* AFMC, Pune.
* Govt. Medical College Amritsar.
* NIMS University, Jaipur.
* Pt. Bhagwat Dayal Sharma Postgraduate Institute of Medical Science. Rohtak
* Many more Colleges in different States

**3.66 Bachelor of Science (Post-basic) Nursing**

**Introduction**

* Post Basic B.Sc. Nursing Course prepares the Nurses for a wide variety of professional roles and graduate study.
* The aim of this program is to prepare graduates to assume responsibilities as professionals, competent nurses and midwives in providing promotive, preventive, curative and rehabilitative services, who can make independent decisions in nursing situations
* Protect the rights of individuals in pursuit of health.
  1. **Actuarial Sciences (85)**
  2. **Allied Science.**
  3. **Animal Husbandry.**
  4. **Archeology (55)**
  5. **Art Restoration (56)**
  6. **Astronomy and Astrophysics (5)**
  7. **Computer Science (35)**
  8. **Curator (57)**
  9. **Educational/vocational School Counseling (58)**
  10. **Energy & Power—2 years, NIMS University, Jaipur**
  11. **Environmental Science (37)**
  12. **Fire & safety**
  13. **Geo-informatics**
  14. **Green technology.**
  15. **Material Science**
  16. **Merchant Navy.**
  17. **Meteorology (23)**
  18. **Metallurgy (22)**
  19. **Monuments & Sculpture Restoration (59)**
  20. **Museology (60)**
  21. **Natural-resources and sustainable development.**
  22. **Naturopathy (50)**
  23. **Nuclear Science and Technology.**
  24. **Oceanography (42)**
  25. **Oil & Gas**
  26. **Rehabilitation Psychology (62)**
  27. **Physical Science (26)**
  28. **Rehabilitation Therapy (63)**
  29. **Social Work (64)**
  30. **Space Science.**
  31. **Special Educator (65)**
  32. **Speech Language & hearing (66)**
  33. **Statistical Science (43)**
  34. **Veterinary Science (44)**
  35. **Wildlife Biology (45)**
  36. **Natural-resources and sustainable development.**

**3.103 Animal Husbandry**

**Introduction**

* As the name suggests, the discipline deals with animals and aspects associated wit animal care and breeding.
* It ia a branch of Agriculture, technically. Most Agriculture colleges offer animal husbandry.
* It deals with aspects such as animal care, breeding and raising of livestock of those animals that provide us meat, fibre, milk, eggs or other useful products.
* Animal husbandry brings with it many challenges such as—nutrition, diseases, shelter management, sustainable farming, lack of resources, lack of suitable climate etc.
* The discipline puts to use various techniques and knowledge to find solutions to these problems.

**Courses**

1. Diploma in Animal Husbandry
2. Diploma in Animal Husbandry
3. Diploma in Animal healthcare worker
4. Diploma in Dairy Technology
5. B.Sc. in Animal Husbandry
6. B.Sc. in Animal Husbandry and Dairying
7. B.V.Sc. and AH
8. PG Diploma in Animal Husbandry
9. M.Sc. in Animal Husbandry
10. M.V.Sc.

**Some of the Places were students find works are;**

* Poultry farms as Farm Manager
* Zoological Parks as Animal health care technician
* Veterinary clinics as Veterinarian
* Dairy farms as an Instructor
* Relevant Government departments as R & D professional

**Institutions/colleges/ universities**

**3.104 Fire & safety**

**Introduction**

Fire Engineering can be defined as, the application of scientific and engineering principles, rules and expert judgments, based on understanding of the phenomenon and effects of fire, its reactions and behavior of people, property and the environment from the destructive effects of fire.

**Program highlights**

* To impart professional training in Fire engineering, Safety and Disaster management to cater to the needs of private and public sectors, government and municipal fire services in and out of India.
* To provide qualified and well trained fire service and safety personnel for the above mentioned organizations.
* To upgrade and modernize the fire fighting equipments through research and development.

**Job opportunities**

* Safety Manager
* Fire protection technician
* Safety Inspector
* Safety supervisor
* Fire Officer

**Courses**

* Diploma in Industrial Safety & Disaster management (10+2 any stream)—1 year
* Diploma in Fire & Safety management (10+2 any Stream)—1 year
* B.Sc. in Fire Tech.& Industrial Safety management (12+2 any stream)—3-year
* PG Diploma – Health, Safety & Environment (B.Sc./BE/B. Tech from any stream)—

1 year

* PG Diploma—Fire & Safety Management (Graduate in any Stream)—1 year
* PG Diploma –Industrial Safety Management (Graduate in any Stream)—1 year

**Admission Procedure**

* Admissions in Fire & Safety Management Programs are through University Joint entrance test (UJET), STATES & National level entrance test.
* Direct admission can be obtained on merit cum preference basis.

**3.105 Nutritionist**

* Nutrition is the science of food, nutritionist and their impact on health.
* Nutritionists are the experts in food science, technology, therapeutic diets and public health issues.
* A nutritionist studies food from the time of harvest till it is consumed
* They also carry out qualitative analyses of food being consumed.
* With changing lifestyle the demand for trained and qualified nutritionist has increased many folds in different avenues such as research, education, hospitals and first-moving-consumer-goods companies.
* Food companies have nutrition division where nutritionists are involved in multiple projects like providing inputs for product innovation, coordinating and participating in the cross-functional team meetings, supporting and driving improvement decisions.
* School health nutritionist is another upcoming career.
* Food journalism to review the various cuisines from the health point of view is also catching on.
* Nutritionists could even be hired for gyms and health care centres.

Qualification:

* Home science as a subject in class Xi and XII,
* B.Sc home science or any stream in science.
* It can be followed with a master’s in home science.
* Preference is given to candidates with science background in XII.

**Skills/traits**

* Updated knowledge on current trends in nutrition, health and wellness.
* Knowledge of food laws.
* Technical knowledge the fundamental of nutrition, physiology and foods science.
* Good interpersonal skills.
* Good writing skills for producing reports, leaflets, presentation etc.
* Basic knowledge of human psychology.
* Research-oriented mind.

**Duty hours**

* Working as a nutritionist in a multinational company is very different from the usual hospital set up in terms of delivery and expectations.
* The schedule is similar to a marketing/technical personnel’s routine which can beyond the usual nine hours of work, depending on the projects one is involved in.

**Pay**

* Fresh nutritionist Rs. 15000/= to 20,000/=
* Those with a Master’s degree in nutrition or Home Science can expect a higher pay package ranging between Rs.2.5 lakh—7 lakh per annum.
* The salaries get higher with experience.

**Institutes and URLS**

* Institute of Home Economics and Lady Irwin College, Delhi (du.com.ladyirwin.edu.in)
* Mount Carmel College, Bangalore (mountcarmelcollegeblr.co.in)
* University of Mumbai ([www.mu.ac.in](http://www.mu.ac.in)).
* Osmania University, Hyderabad ([www.osmaniaac.in](http://www.osmaniaac.in))

**Pros and cons**

* Advise people to live healthy
* Wider scope due to increased awareness in cities
* New learning opportunities everyday while working In a cross functional team set-up
* If attached with a hospital, work in shifts and sometimes required to do night duties.

***Time has come when most food companies will appreciate the value of a skilled Nutritionist.***

**/**

**ENGIREERING**

**B.TECH**

**3.105 Aeronautical Engineering (1)**

* Aeronautical Engineering is one of the toughest Engineering course in India. the BE, B.Tech is a 4-year course full time course
* After successful completion of the course students can pursue their career as an Aeronautical Engineer.
* These engineers are then responsible for creating, developing normality in the technological field of space, defense, and aviation.

**Subjects involved in aeronautical Engineering**

* The full time 4-year course comprises of subjects like Material Science, fluid Dynamics, Essential of Propulsion, Structural Analysis, Aerodynamic theory, Material science and so on.
* These students can also get specialization like Navigation Guidance, communication, instrumentation, Methods of Production of products for Rockets, aero planes and Helicopters.

**Qualification Required**

* 10+2 with PCM with at least 50% in each subject.
* JEE for selection in Top IITs

**3.106 Aerospace Engineering**

**Introduction**

* B.Tech. Program in **Aerospace Engineering** is aimed at imparting sound knowledge in the fundamental areas of the discipline and also expose students to advanced applications of this knowledge.
* **Aerospace Engineering** is the discipline which is closest to what is popularly known as ***“Rocket Science”***
* it is a 4-year degree course

**Eligibility**

* 10+2 with PCM
* There are several Entrance exams such as (MHTCET) conducted by the Institutes for admission process.

**Institutes/colleges/universities**

* IIT kharagpur, Madras, Chinnai
* The neotia College, Kalkate
* Chadigarh University
* BITS Hyderabad
* IIT Delhi
* Delhi Technology University
* National Institute of Technology, Delhi.
* Netaji Subhash University of technology, Delhi..

**Course Fee**

* 6-9 lacs

**Job opportunities**

* ISRO, DRDO, HAL, ONGC and NAL (all government sectors)
* Private sectors such as, global Airlines, Aircraft companioes.

**Average starting Salary**

* 5-10 lacs.

**Job positions**

1. Design Engineer, 2. Development Engineer, 3. Sensor Engineer, 4. Team Leader,

5. Filtration Manager etc.

**3.107 Aircraft Maintenance Engineering**

**Introduction**

* This Engineering course is most demanding and high profile career in aviation sector in India.
* **Aircraft maintenance engineers** inspect, repair and overhaul civil aircraft.
* Most engineers specialize in either Mechanical or avionic engineering.
* Mechanical engineering includes engines and airframes.
* They also follow up and fix any problems that aircrew may have reported with the aircraft.
* Aircraft maintenance Engineering is not a degree or diploma course, but a training program.
* On completion of the training, a license is issued by the directorate of Civil Aviation (DGCA).
* During the training, lessons are imparted for **service** and **maintenance** of **Aircraft** so as to ensure flight safety.
* Students who wish to work in aviation industry can study Aerospace or Aeronautical Engineering at the B.Tech. level or study Aircraft Maintenance Engineering.
* Aeronautical or Aerospace Engineering deals with the design and manufacture of Aircraft while AME trains one for servicing the Aircraft.

**Eligibility**

* 10+2 with PCM, at least 50% marks in aggregate in PCM.

**Total training cost**

* Around 1.5 lacs.

**Institutions**

* Centre for Civil Aviation Training, New Delhi, approved by DGCA
* Fly Tech Aviation Academy, Bowenpally, Secundrabad (A.P**)**

**Job opportunities**

* Those who successfully complete the training and obtain DGCA’s license are eligible to get jobs in airports and aircraft manufacturing or maintenance firms with an attractive salivary. As more and more airlines start operations in the private sector, there will be an increase in demand for aircraft maintenance engineers and mechanics.

**3.108 Architecture.**

* A dream of drawing and creating over building sites, making models, designing…. If these are doing the things and getting away with calling it work, **ARCHTECTURE** might just be the profession for you.
* As children some of the first drawings we make are the pictures of homes.
* As adults some of the dreams we nurture most is that of making a home.
* Housing has been and will always remain one of the most significant aspect of our lives.
* With this comes the importance of people that gives shape to these dreams--**Architects**
* An Architect mainly deals with the planning, design and oversight of a building and the site surrounding it.
* They are well equipped with information on all building regulations, design aspect and other technicalities of making a home.
* Architecture as a profession is an equal blend of creativity and technicality.
* It is important for those who want to pursue architecture to really be sure that they have the aptitude and interest for it.
* Interest in designing and sketching, having passion enough to commit to the task and dreaming are some of the important attributes an aspiring architect must possess.

**The fundamentals**

* 10+2 with Math as one of the subjects.
* An aggregate of 50% marks is a criteria to be able to appear for the aptitude test called the National Aptitude Test in Architecture (NATA).
* This test measures the drawing and observation skills, sense of proportion, aesthetic sensitivity, critical thinking ability of the applicant that have been acquired over a long period of time and that are related to the field of architecture.
* Based on the scores, a National Council helps placed students in their preferred colleges
* The 5 year Bachelor degree is divided into 10 semesters that cover all the technical aspects of building design and construction.
* Aside of this, students also get to choose subject aspect of building such as interiors, project management, architectural journalism, Landscape etc as an elective.
* The final year of the course (9th and 10th semesters) is dedicated to the student’s final thesis paper and practical training under a practicing architect.

**Career prospect**

* The successful completion of this degree enables a student to get registered as an architect under the Council of Architect (CoA).
* Anny architect registered under the CoA is eligible to start practice either individually or by joining an already existing firm.
* There are also private-run institutions that offer diploma courses in architecture. However one has to be aware that only candidates passing out of institutes and colleges recognized by the CoA are eligible for registration as an architect.
* There are myriad of options to choose from at the Master’s level.
* The common ones are urban design, landscape architecture and interior design.
* There are less conventional subjects too which many students choose from such as;

Product design, Photography, architectural journalism, design management, design for retail experience, etc.

* It is said that “Architecture of any place is reflection of its people, culture and progress.

**College offering B.Arch.**

* School of planning and Architecture, JNTU, Masab Tank.
* Church of South India Institute of Technology (CSIIT), Secundrabad
* SVCA, Madha pur, Hyderabad.
* **School of Planning and Architecture, Delhi.**
* RV College, Bagalore.
* Sir JJ College, Mumbai.
* Amati University, Chattes Garh, Raipur.
* IIT Kharakpur, Tiruchirappalli, Nagpur, Ranchi, Roorkee, Rourkela,
* Malviya National Institute of Technology, Jaipur
* Indian Institute of Engineering Science and Technology, Howrah
* Maulana Azad Institute of Technology, Bhopal
* And many more
* Hmr Institute of Technology & Management, Delhi (private)
* MBS School of Planning & Architecture, Delhi (Private)
* Vastu Kala Academy College of Architecture and interior Design, Delhi (private)
* School of Planning & Architecture, Delhi (Public College
* University School of Architecture and planning, New Delhi (Private)

**B. Arch admission process**

* In order to seek admission in B. Arch course, a candidate is required to appear for the NATA exam (National Aptitude test for Architecture) which is conducted by the Council of Architecture (CoA) to screen the candidates for selection.he
* Once the NATA score is out, states conduct a counseling process where on the basis of candidate’s rank, he/she is allotted a seat in any of top architecture colleges in India.
* Different States and Colleges may also follow a separate admission process.

**Architecture of any place is a reflection of its people, culture and progress. Today, as we progress into a time of real estate and construction boom, increasing number of people are being able to afford homes. Architects can be assured to have their hands and pockets full for a long time to come.**

* 1. **Advanced Engineering**
  2. **Airspace Engineering (2)**
  3. **Automobiles (6)**
  4. **Artificial Intelligence (4)**
  5. **Bio-technology Engineering (8)**
  6. **Bio-medical Engineering (7)**
  7. **Ceramic Engineering (9)**
  8. **Chemical Engineering (10)**
  9. **Civil Engineering (11)**
  10. **Cloud Computing (Electronics & communication with specialization in**

**Cloud computing & virtualization Technology )**

* 1. **Communication,**
  2. **Computer Applications. (33)**
  3. **Computer Science (34)**
  4. **Computer Science Engineering (12)**
  5. **Cyber Security (35)**
  6. **Electrical Engineering**
  7. **Electrical & electronics Engineering (13)**
  8. **Electronics**
  9. **Electronics & Communication Engineering (14)**
  10. **Fashion Technology (B.Tech.)**
  11. **Geo-informatics,**
  12. **Geo-science,**
  13. **Industrial Engineering (15)**
  14. **Information, communication and Entertainment (16)**
  15. **Instrumentation Engineering (17)**
  16. **Manufacturing Science & Engineering (18)**
  17. **Marine Engineering (19)**
  18. **Material Science and Engineering**
  19. **Mechanical Engineering (20)**
  20. **Mecha-tronics,**
  21. **Medical Electronics Engineering (21)**
  22. **Merchant Navy**
  23. **Mining Engineering (24)**
  24. **Nanotechnology**
  25. **Naval Architecture Engineering (25)**
  26. **Nuclear Science and Technology (Nuclear Engineering)**

**Introduction**

* Nuclear science and Technology is the cutting edge technology in the world today.
* The importance of nuclear power and its immense potential has long been recognized, but, the technology was still in an infant state.
* As the energy crisis in the world intensifies, the price of fuel is going up.
* In this situation, nuclear energy presents the most viable long term method of dealing with the energy crisis.
* More and more nuclear power plants have been set up all over the country and many more have been planned to satisfy the rising demand for electricity
* In this situation, there exists a good scope of career and advancement for the young and dynamic scientists in nuclear Science and Technology.

**Courses recognized under nuclear Science and technology**

1. B.Sc. Nuclear medicine Technology
2. Diploma in radiation Medicine
3. M.Tech. Nuclear Medicine
4. MD in Nuclear Medicine
5. PG in Nuclear Engineering
6. PG in Nuclear Science and Technology
7. PhD in Nuclear Medicine
8. Ph.D. in Theoretical Nuclear Physics

**Job Opportunities**

* Job in Nuclear Power Plant in various capacities depending on your specialization. Jobs may be; a Project Engineer, Chemical Engineer, Design Engineer, Control and Instrumental Engineer and Nuclear, Mechanical or Structural Engineer.
* Physicist either in Nuclear Plants or in Nuclear Research facilities.
* Nuclear Weapon Engineer, after higher specialization.
* As Manager of Nuclear waste material
* Academic career in Nuclear Science Technology and research

**Eligibility:**

* 10+2 PCM
* Sit for the entrance examinations conducted by various Public and Private Institutes

**Duration the of course:** 4 years

**Institutes/colleges/institutes**

1. Koneru lakshmaiya University, Guntur.
2. S.R.M. University, Kanchipuram
3. Manipal Institute of Technology, Karnataka.
4. School of Nuclear aaaaenergy, Pandit Deen Dayal Petroleum University, Gandhi Nagar.
5. Amity School of Nuclear Science and Technology.
6. Jawaharlal Nehru Technological University, Kakinada.
   1. **Oceanography**
   2. **Oil & Gas.**
   3. **Petroleum Engineer**

**Introduction**

Petroleum Engineering is a discipline concerned with the surface activities related to the production of hydrocarbons—which can be either crude oilor natural gas.

These are the activities within the upstream sector of the oil and gas industry that includes exploration for hydrocarbons.

Petroleum Engineering is broadly consists of different areas such as drilling, reservoir and production stream.

Drilling deals with designing and implementing procedures to drill wells as safely and economically as possible, and depending on its purpose. It may be used for analyzing hydrocarbon pools (major fossils such as coal, petroleum and natural gas are hydrocarbons).

Reservoir Engineering deals with study of such pools and work out on ways to utilize it.

Production Engineering comes into play after the reservoir has been understood and wells have been drilled and hydrocarbon begins to flow.

An important challenge facing the profession is high risk in investment under high degree of uncertainty in oil and gas reservoirs.

Qualification: PCM in class 11th and 12th.

Test: All India Entrance test such as JEE

After graduation: M. Tech and later Ph.D

**Institutes and URLS:**

* Indian School of Mines
* Pandit Deendayal Petroleum University, Gandhi Nagar ([www.pdpu.ac.in](http://www.pdpu.ac.in))
* Maharashtra Institute of Technology, Pune ([www.mitpune.com](http://www.mitpune.com))
* University of Petroleum and Energy Studies, Dehradun ([www.upes.ac.in](http://www.upes.ac.in))
* Rajiv Gandhi Institute of Petroleum Technology, Rae Bareli ([www.rgipt.in](http://www.rgipt.in))
* CSIR-Indian Institute of Petroleum, Dehradun ([www.iip.res.in](http://www.iip.res.in))
* Dibrugarh University, Assam ([www.dibru.ac.in/page.php?cat=Deparment](http://www.dibru.ac.in/page.php?cat=Deparment) &id=Petrolem%20Technology)

**Pros and cons:**

* The job is challenging
* Long working hours of shore: 7A.M. to 8.30 P.M.
* Exposure to best-in-class technology
* High Salary (1.5 times more than that his counterparts in other core sectors. Those with added skills 2-3 times as much their professional growth is very fast)
* Wide spectrum of activities.
* Work in remote locations
* Jobs are concentrated in certain parts of the world.
* Physically strenuous.

Skill/traits

* Job related to data processing and interpretations are done with the help of state-of-the-art software running on sophisticated hardware.
* Hence one is required to be technologically savvy.
* Drilling involves dealing with subsurface conditions of pressure and temperature and requires high skill with machinery and related judgment.

**To be a successful petroleum engineer, one should have knowledge of geology, geophysics, reservoir engineering and management, and be ready to work in synergy.**

* 1. **Polymer Engineering (27)**
  2. **Robotics (28)**
  3. **Space Science.**
  4. **Techno-legal etc.**
  5. **Textile Engineering (29)**

**Medical Science & Dentistry**

* 1. **MBBS, (M. D/M.S. in all branches)**
  2. **BUMS.(53)**
  3. **BAMS (47)**
  4. **BHMS (49)**
  5. **Siddha (52)**
  6. **BDS (48)**
  7. **Pharmacy (51)**

**Paramedical**

All those preparing for MBBS cannot get admission in first attempt. At least they should try second attempt with proper coaching.

Following alternate options for Biology students are also available

* 1. **Actuarial Science (85)**
  2. **Bachelor of Pharmacy**
  3. **Bachelor of Physio-Therapy (BPT)**
  4. **Bio-informatics**
  5. **Bio-medical Science.**
  6. **Bio-technology (32)**
  7. **Cardio vascular Care Technician, 2-years**
  8. **Clinical pathology.**
  9. **Current Research Scope in Science**
  10. **Dietetics.**
  11. **Dental mechanics.**
  12. **Diploma in Medical laboratory Technology**
  13. **Diploma in Operation Theatre Technology …2 years.**
  14. **Diploma Pharmacy**
  15. **Diploma in Radio Imaging Technology … 2 years**
  16. **Environmental Science**
  17. **Forensic counseling.**
  18. **Forensic-science,**
  19. **Genetics**
  20. **Green Technology**
  21. **Health management.**
  22. **Histopathology.**
  23. **Hospital Management (93)**
  24. **Invasive Cardio Vascular tech. 2-years**
  25. **Lab technology,**
  26. **Lab-technician (Pathology)**
  27. **Marine Science**
  28. **Medical Anatomy**
  29. **Medical Lab Technology.**
  30. **Medico-legal Work**
  31. **Medical Micro-biology.**
  32. **Medical & Clinical Physiology**
  33. **Medical Microbiology**
  34. **Medical Physiology.**
  35. **Medicine & Radiology**
  36. **Medical Transcription.**
  37. **Medico-legal work.**
  38. **Natural Resource and Sustainable Development..**
  39. **Occupational therapy.**
  40. **Operation theatre Technology-2 years (10+2)**
  41. **Ophthalmic Technician- 2 years (Institute of Public health and hygiene,**

**(RZ-a-44 Mahipalpur, 011-26782850-54)**

* 1. **Oral medicine and radiology**
  2. **Rehabilitation counseling.**
  3. **Speech and Audiology.**
  4. **Ultrasonology—4 D (Institute of Public Health & Hygiene,**

**(001- 26782850)**

* 1. **Veterinary Science.**
  2. **Virology and Immunology.**

**(Separate information in detail about courses and Universities).**

* 1. **X-ray and Electrocardiography tech (----do-----)(10+2)**
  2. **X-ray technician.**

**PROFESSIONAL/VOCATIONAL COURSES**

**(After class 12th--Common for all streams)**

There are plenty of courses to opt for after 12th common for three streams. One need to choose career options that provide good scope in future and at the same time develops interest to pursue it among students. Selecting a career option is one of the major decisions in a student’s life. Thus it must be made wisely after proper attention and understanding the field.

* 1. **Advertising, communications & events (68)**
  2. **Administration.**
  3. **Air-hostess (for girls).**
  4. **Animation (79)**
  5. **Art Direction (72)**
  6. **B.A. IN SCRIPT WRITING**
  7. **Banking Management (86)**
  8. **Bachelor in Journalism (B.J--3 years)**

**Introduction**

It is an undergraduate Mass Communication course. Journalism is concerned with collection and dissemination of news through the print media and electronic media. The candidate is required highly developed skills in language, a good knowledge about media, an interest in current affairs and a broad general knowledge. Students can incorporate specialization in the areas of television, journalism, health reporting, IT reporting, business and finance reporting, crime reporting, sports reporting or foreign correspondant.

**3.218 Bachelor of Business Administration (BBA) (87)**

**Introduction**

* One of the most popular bachelor degree program after class 12th. BBA course is the gateway to numerous job opportunities in a number of sectors like marketing, education, finance. Sales and government to name a few.
* The course offers knowledge and training in management and leadership skills, to prepare them for managerial roles and entrepreneurship. During the tenure of the course, candidates learn various aspects of business administration and management through classroom lectures and practical projects internship.
* BBA can be pursued in full time as well as correspondence mode. There are various specializations one can choose from like Human Resource Management, Finance, Sales and Marketing and Information Technology.

**Eligibility**

10+2 in any stream

**Entrance exam**

Generally admission is granted on the basis of an entrance test conducted by the Institute/college. Few institutes conduct group Discussion and personal interview rounds followed by entrance test. Final admission is granted to candidates on the basis of scores obtained in the qualifying examination test, and GD-PI. Some of the popular BBA entrance examinations are listed as under;

NPTA, IMPT, FEAT, UGAT, AUMAT, BHU UET

**BBA Specialization**

Some of the most popular BBA specializations are listed below

* BBA Finance
* BBA Human Resource
* BBA Foreign Trade
* BBA in Banking and Insurance
* BBA Marketing
* BBA Hospitality and Hotel Management
* BBA Information Technology
* BBA Communication and Media Management
* BBA Hospital and Healthcare Management

**Jobs after BBA**

* Human Resource Executive
* Marketing Executive
* Marketing Manager
* Sales Executive
* Research &Development (R&D) Executive
  1. **Bachelor of Business Management (88)**
  2. **Bachelor of design (accessory)**
  3. **Bachelor of design (leather)**
  4. **Bachelor of interior designing**

**3.215 Bachelor of Management Studies (BMS)**

**Introduction**

Bachelor of Management Studies (BMS) is an undergraduate program for management Studies offered by many universities throughout the world. The course allows you to obtain the knowledge and skills needed to assume management positions in a wide range of organizations.

* It helps students specialize in **management** and provide exposure to **subjects**  like business, finance, economics, and marketing.
* The major areas include labour **management,** negotiations, conflict resolutions, compensation systems, organizational behavior and statistics
* BBA and BMS are one and the same degrees with different names depending upon the college that offers the course
* B.Com. is for those students who are interested in accounting and those who would like to have a wider choice of subjects for higher studies viz; Economics, MBA related degrees as their higher studies option.
* BBA/BMS for those who want to pursue MBA later as this will help tremendously in MBA.

**Eligibility**

10+2 all streams

**3.216 BACHELOR OF MASS MEDIA (BMM)**

**Introduction**

It is a 3-year is an undergraduate Mass Communication course dealing with communication medium used by the masses. It includes newspapers, magazines, cinema films, radio, television, etc. the duration of the course is generally 3 years. In the third year, students need to choose an area of specialization like Journalism, Advertizing etc. these may vary from institute to institute. On job training is also provided through an internship in 2nd year of this course. Apart from these, seminars, group discussions and field visits are frequently undertaken for 3 years.

**Eligibility**

10+2 in any stream, percentage requirement may vary from institution to institution.

Some institutes also conduct entrance examination.

**Courses**

Bachelor of Mass Media

**Institutions/Colleges/Universities**

**Employment areas**

* All India Radio
* Central Information Service
* News papers
* Periodicals and magazines
* Press Information Bureau
* TV Channels
* Websites etc.

**Job types**

* Columnist
* Correspondent
* Editor
* Freelance writer
* Journalist
* News Analyst
* Photo Journalist
* Reporter etc.

* 1. **Bachelor of product design**
  2. **Bachelor of textile design**
  3. **Bachelor of interior designing**
  4. **BACHELOR OF MASS COMMUNICATION (BMC)**

**Introduction**

Mass communication is the process of disseminating information through a medium to a large and diverse audience. BMC course is a form of public communication, where the message or information is transmitted electronically or mechanically. Mass communication is made up of branches like PR, Journalism, advertising and mass media. Now a days Journalism and mass Communication is a very well known course combination.

**Eligibility**

10+2 in any stream with a minimum of 50% marks.

**Admission Procedure**

Admission procedure has two rounds

**First round**

Students will have to appear for the entrance test conducted by various institutes. This exam is a common objective and written test which is held in several cities across India. students will be short listed for second round on the basis of their entrance test score.

**Second Round**

If they successes in getting short listed, they will have to be present at the centre for the duration of 3-4 hours for the same. In this round they will have to a written ability test, they have certain documents verified and participate in a studio test as well as a personal interaction

**Institutions/colleges**

* JMI and other Institutes in India
  1. **BACHELOR OF MASS MEDIA (BMM)**
  2. **BFA**
  3. **Call Centre- training.**
  4. **Communication Design (81)**
  5. **Communication & events**
  6. **Communication and Media-studies**
  7. **Corporate Intelligence (101)**
  8. **Curator (57)**
  9. **Design (82)**
  10. **Diploma in Digital Management.**
  11. **Diploma in Elementary Education**
  12. **Drama Production (75)**
  13. **Drawing and Painting**

**Introduction**

BA in **Drawing and Painting** is an undergraduate course. Part of drawing and painting is the addition of texture, whether the piece is realistic or abstract. There are various kinds of textures in art and design. Actual and real textures are those that can be touched such as the smooth surface of a metal sculpture or the spiky surface of a cactus. We can readily identify a material by its texture.

**Eligibility**

10+2 in any stream

**Courses**

Graduation course: 3 years

**Colleges**

* College of Arts, Delhi
* JMI
* AMU, Aligarh
  1. **English literature.**
  2. **Event Management (92)**
  3. **Fashion technology.**
  4. **Finance**
  5. **Financial Market Management**
  6. **Film Choreography (73)**
  7. **Film Cinematography (80)**
  8. **Film Direction (74)**
  9. **Film-making.**
  10. **Finance and Financial Management**
  11. **Financial Market Management**
  12. **Fine Arts**

**Introduction**

It is the academic study of visual work of art such as painting, dance, sculpture, photography, paintings and others. The course is also known as Bachelor of Visual Arts (BVA). It is a great career choice for the aspirants who enjoy imaging and creating something new. BFA offers students professional training standards, cultural exposure, aesthetic awareness and knowledge about different types of arts.

**Eligibility**

10+2, with at least 50% marks

**Courses**

BFA, MFA In photography, fine arts, ceramics, creative writing etc.

**Career options**

Ceramics, animation, drawing and painting, film production, craft artist, art teacher, publishing houses, sculpture, dance, film and TV, musical theatre, and others. Each area of fine arts is specific, but there are also some lapping courses.

**Institutions/colleges/universities**

* Faculty of Music and Fine Arts, DU.
* College of Arts, DU
* Department of Fine Arts, AMU
* Department of Fine Arts, JMI
  1. **Fire Safety Management (100% Job oriented Program--9871549659)**
  2. **Furniture and interior design course**
  3. **Flight/ aviation/ Pilot.**
  4. **Food science and Nutrition (103)**
  5. **Foreign language. (104)**
  6. **Graphic Designing (83)**
  7. **Hair and Beauty-training Academies.**
  8. **Healthcare & Gym (UG & PG)**
  9. **Hospital Management (93)**
  10. **Human Resource Development**

**Introduction**

* Human resource Development (HRD) can be defined as a set of systematic and Planned activities designed by an organization to provide its members with opportunities to learn necessary skills to meet current and future job requirements.
* Learning is the fundamental principle that drives organizations towards higher concentration on Human Resource Development.
* HRD activities should begin when an employee joins an organization and continue throughout his career, irrespective of the authority level that the person holds.
* Companies require their human resource management professionals to possess a bachelor’s degree or even a Master’s degree particularly for senior-level leaders like HR directors and labor Relations Managers.
* It is very rare to find an entry-level job in the HR field without at least a bachelor’s degree.

**Eligibility**

* 10+2 in any stream

**Courses**

Bachelor’s degree in human resources or human resource management may be designed as;

* Bachelor of Science (BS)
* Bachelor of Arts (BA)
* Bachelor of Business Administration (BBA)
* BS/BA degree programs are most often designed as
* BA/BS in Human Resource Management
* BS/BA in Management with a concentration in Human resources.

Because of the business focus of most human resources degree programs, Bachelor’s degrees are often designed as;

* BBA wit concentration inhuman Resources.
* BBsA with a concentration in Organizational Behavior.
* BBA with concentration in Industrial Relations.
* BBA with a concentration in Management and Leadership.

Bachelor’s degree programs are designed to prepare students for entry-level positions in any number of HR areas, such as;

* Employment and Recruitment ‘
* Training and Development.
* Compensations and benefits.
* Employee and Community Relations.
* Personnel records.
* Health and safety strategic planning.

**Institutions/Colleges**

(IMI, IGNOU)

**Master’s Degree programs in Human Resources**

Organizations are now seeking highly skilled HR professionals who can take an active role in building the strategic vision of an organization. Therefore Master’s degrees in human Resources are more popular than ever.

* 1. **Insurance. (opportunities in this sector) (96)**
  2. **Interior Designing (106)**
  3. **Investment and Mutual Fund**
  4. **Jewelry Design Course**

**What is a Jewelry Design?**

Jewellery design is a field wherein professionals design as well as create jewellery. The entire process of making a jewellery is quite complex and requires technical expertise. Before any jewellery piece is created, a design for it is conceptualized through a detailed drawing which is made by a jewellery designer.

A jewellary designer is a person who is trained in such a way that he/she has an architectural as well as well as functional knowledge of different materials, compositions, fabrication techniques, wearable as well as the market tends.

**Eligibility**

10+2 in any stream for admission at UG level

For admission at PG level graduate is the requirement , if the candidate has the required skills.

**Courses**

**UG Courses:** BDes in jewellery design, B.Sc. in jewellery design, BA in jewellery design and BVoc in jewellery design

**PG Courses:** MD. In jewellery design, M.Sc. in jewellery design, MBA in jewellery design.

**Diploma courses** are also available.

**Required skills**

* Good communication skills
* Visual imagination
* Eye for detail
* Adequate knowledge of past and present market trends
* Creativity
* Innovativeness
* Intra personal skills
* Knowledge of different metals and gems

**JEWELLERY DESIGN UG COURSES**

**BDes Jewellery design**

**Syllabus**

* Elements of design
* Design foundation for jewellery
* Gemology
* Setting of gem stones In jewellery
* Computer aided design (CAD)
* Design with different techniques and ideas
* Merchandising
* Branding
* Digital representation
* Marketing and advertising
* Materials for design
* Accessory design
* International market
* History of arts and jewellery
* Diamond grading
* Export procedure
* Manufacturing costume jewellery
* Rendering techniques
* Metallurgy and casting process (design theory)
* Design theories and practices
* Product business planning
* Advanced CAD
* Methods and instruments for design
* Indian market
* Manufacturing process

**BA Jewellery Design**

* Introduction to jewellery design
* Design concepts
* Cultural studies
* Material exploration
* Communication skills
* Design studio (experience/skill based design collection)
* Design studio (logic and data based system design project)
* Design studio (institution based design collection)
* Design studio (handcrafted high fashion exquisite jewellery design collection)
* Professional, visual and presentation methods
* Gemology
* Body and adornment (economics, anthropometry)
* International language
* Jewellery rendering and presentation methods

**B.Com. Jewellery**

* Fundamentals of jewellery design and gemology
* Drawing and rendering (matals and Gemstones)
* Theme based designing
* History of jewellery
* Cost based designing
* Historical designing
* Orthographic views
* Indiann and international jewellery market
* Diamond grading and sorting
* Manufacturing process
* Accessory design
* Marketing, advertisement and brand building
* Advanced computer aided designing

**B. Sc. Jewellery**

* Jewellery designing
* Introduction to jewellery design
* History of jewellery
* Design and colour theory
* Metal and stone rendering technique
* 3D methodologies
* Researching and developing them-based designs
* Jewellery products and classification
* Designing for luxury and retail jewellery segments
* Designing for domestic and international market
* Research based project
* Portfolio development

**Gemology**

* Basic quality of a gem
* Method employed in gem mining
* Physical and optical properties of gems
* Gem-cutting techniques
* Crystallography and applications in gemology
* Instruments in gem identification
* Limitations and precautions
* Synthetics, composites, imitation gemstones
* Systematic identification of gemstone groups
* Individual stones and their stimulants

**Diamond grading**

* Introduction to uniqueness of diamond and journey from mines to cutter
* Cutting and polishing process
* Study of round brilliant cut
* Basics of polished ddiamonds
* Grading using international standards
* History of cuts
* 4 Cs: Grading for colours, clarity, cut and carat
* Identification of diamond and dimond stimulants

**Jewellery manufacturing**

* Properties of metals
* Alloys
* Manufacturing terminology
* Utility and limitations of important tools
* Cutting and blending pattern and texture
* Fusing and soldering
* Cold joining
* Finishing, patinas, stone setting, mechanism and chains
* Casting technology
* Hollow form
* Platinum jewellery

**BBA Jewellery Design and Management**

* Principles of management
* Communication skills
* Jewellery and gem business in India
* Computer Applications
* Quantitative techniques
* Accounting practice
* Organizational behaviour
* Business Economics
* Instrumentation study
* Business taxation
* Management accounting
* Ornament designing
* Gemology
* Marketing management
* Human resource management
* Production management
* Salesmanship and retailing
* Financial management
* Management information system
* Legal aspect of business
* E-commerce
* International trade
* Entrepreneurship development
* Advanced jewellery workshop

**Diploma Programme in Jewellery design and Technology**

* Drawing skills, free hand , human form, perspective and objective drawing
* Environmental exposure
* Colour science
* Introduction to Geometry
* Form and Space
* Introduction to gold smithing and metallurgy
* Introduction to gemology
* Design project
* Introduction to presentation and documentation
* Basic gold smithing and jewellery making skills such as filing, wire drawing and sheet rolling
* Students will learn how to use all hand tools and workshop machinery
* Practical training on individual and well equipped workbenches
* Lectures on safety regulations
* Technical exercise will be followed by design exercise in jewellery making
* Presentation techniques
* Design methodology
* Wax modeling
* Introduction into casting technology and the complete casting production cycle
* Polishing and finishing techniques
* Stone-setting
* Design and manufacturing exercise on jewellery fittings
* Etching and epoxy
* Engraving and enameling
* Repousse
* Stamping, coining and hallmarking
* Electroplating
* Quality control
* Maintenance of equipment and tools
* Safety, health and environment
* Export documentation and money realization
* Gemology—study and identification of diamonds and other coloured gemstones
* Research—domestic and international markets
* Photograph offers—costing, price analysis, and inputs in marketing and promotion
* Widow display and packaging
* Introduction to photography
* Design collection
* CAD Jewellery design

**Comprehensive Jewellery Designing**

* Visualization and representation technique and freehand object design
* Geometry of design
* Philosophy of colour
* Visual studies: Exploration of forms and textures
* Introduction of metallurgy covering all precious metals
* Design methodology
* Design process and prototyping in paper
* Presentation on traditional Indian jewellery
* Visit to the crafts and National Museum
* Knowledge of Gems
* Presentation technique I: Basic 3D drawing , stone rendering, metal rendering using different media
* Presentation technique II: basic technical drawing including isometry, orthography and perspective drawing
* Presentation technique III: Advanced rendering of faceted and phenomena stones
* Presentation technique IV: advanced technical drawing
* Market research: understanding different jewellery markets
* Design project based on market research
* Window display and packing
* 3 day visit to jaipur
* Computer Aided Jewellery designing (CAD)

**Basic jewellery Designing**

* Visualization and representation technique and freehand object design
* Geometry of design
* Philosophy of colour
* Visual studies: Exploration of forms and textures
* Introduction of metallurgy covering all precious metals
* Design methodology
* Design process and prototyping in paper
* Presentation on traditional Indian jewellery
* Visit to the crafts and National Museum
* Knowledge of Gems
* Presentation technique I: Basic 3D drawing , stone rendering, metal rendering using different media
* Presentation technique II: basic technical drawing including isometry, orthography and perspective drawing
* Lectures and demonstration of Basic jewellery making technique.

**Jewellery Design: Finishing, polishing and electroplating**

* Introduction to tools and equipment
* Magnetic polishing
* Finishing process including use of files, pendant motors, burns, rubber wheels, and emery papers
* Polishing processes including cutting and buffing using different brushes, felt laps, cotton buffs, grinding wheels etc.
* Textures and finishes
* Ultrasonic cleaning and steam cleaning
* Handling polished components
* Introduction to electroplating equipment and chemicals
* Different kinds of plating and galvanic solutions
* Practical exercises in silver and gold plating
* Introduction to part plating techniques and pen platters 5. Part plating techniques and use of pen platters
* Safety, storage and quality check

**Jewellery Design: Engraving and Enameling**

* Cutting process
* Gripping, posture, magnification
* Techniques of marking, decorative engraving, textures and carving to create a surface for enameling
* Basic metal work
* Types of enamels, opaque and transparent
* Preparation and application of enamels
* Enameling kilns and equipments
* Cloisonné and champlevé techniques
* Developing design in colour using basic techniques
* Developing design in colour using basic techniques
* Texture and special effects
* Firing and finishing

**Jewellery Design: Stone setting**

* Introduction to stone setting tools including usage and making of gravers
* Gripping, posture and magnification
* Claw, bezel and channel setting—theory and practical
* Pave, flush and tension setting—theory and demonstration
* Introduction to new setting techniques such as pressure and invisible setting
* Introduction to setting of fancy shape stones
* Finishing of different types settings using burs, files, rubber wheels and emery papers
* Quality check.

**Gemology course**

**Diamonds**

* Historical background, origin, geological timetable, mining, occurrence and major deposits of the world
* Crystallography, physical, chemical, optical properties. Distinctive features, inclusions and characteristics
* Treatment of Diamonds and their method of detection/identification
* Flow of rough diamond from mines to sites, diamond trade
* Nomenclature and grading system
* Importance of 4 Cs (cut, colour, clarity and carat)
* Types and forms of cuts
* Instruments for weight estimation

**Coloured Gemstones**

* Historical background, nomenclature rolex replica sale of gemstone, origin, geological timetable, mining, occurrence. Major gemstones deposit of the world
* Famous gemstones, folklore, influence, healing properties, birthstones and astrological view
* Nature of gem materials, crystal systems, crystallography, physical, chemical and optical properties. Inclusions, characteristics and sources of omega replica sale, best known Gemstones to trade
* Use of gemmolite and other Gemological instruments in identification
* Identification techniques
* Types and forms of cuts
* Enhancement-treatments and methods of detection/identification
* Synthetic stones- important properties and identification methods
* Organic gemstones and their physical, chemical, and optical properties, source and identification techniques
* Instruments for weight estimation.

**Diamond Grading Course**

* Diamond: historical background
* Origin, historical timetable, mining, occurrence, major diamond deposits of the hublot replica sale world, famous diamonds
* Crystallography, physical, chemical, optical properties, distinctive features, inclusions and characteristics
* Nomenclature and grading system
* Importance of 4 cs (cut, colour, clarity, and carat)
* Cut: Round brilliant and its facets, development of the brilliant cut, forms of diamond cut, types of brilliant cut, modified brilliant and fancy cuts, symmetry features, proportion, comprehensive evaluation

**Colour**

* Colour grades, origin and nomenclature, colour grading systems, colour measuring instruments

**Clarity**

* Clarity grades, origin and nomenclature, clarity grading systems, external and internal features

**Carat**

* Weight estimation of hublot replica sale, different cuts such as eight cut, carre, ful cut, navettes, drop shape along with instruments for weight estimation of round brilliant.
* Plotting and grading of cut and polished diamond by colour, clarity-external and internal features, cut symmetry features, calculation of proportions fake rolex sale and cut evaluation
* Diamond and its stimulants including synthetic moissanite and synthetic cubic Zirconia rado replica along with their identification techniques
* Diamond synthesis, treatment of diamonds and the method of detaction/identification

**Gemstone identification Course**

**Jewellery Design, quality control course**

**Jewellery Photography Course**

**Career in the Industry**

1. Starting salary as a jewellery designer is about 70-80 thousand repees per month
2. After having some years of experience, you can be the part of management of any jewellery design company.
3. Starting your own company.
4. Can work with smaller private player or a big brand as an employee. Can work as a repair person or lapidary. It all depends upon your experience and skill
5. You can join the vendor in order to grow your career. It is not difficult to findvendors associated with jewellery industry
6. You can leave the industry and run your mass production or a small unit.
7. You should realize what your future plans are in this industry. Freelancing, own company or something better.

**Institutes/ colleges**

* Allen School of Arts and Design, Jaipur
* Indian Institute of Gem and Jewellery, 19-22, Jhadewalan flatted factories, Delh

1. Courses across 3 streams (<http://www.iigjdelhi.org>)

(a reputed institute)

* Indian Institute of Gem and Jewellery, Jaipur
* Gemological & Jewellery Institute (GJI) (www.gjionline.com)

L-75, LGF, Shiv Mandir Marg, Lajpat Nagar-2

* PG Diploma in managing diamond -jewelry business

Duration—1 year (GD Goenka University)

* 1. **Liberal Studies (107)**
  2. **Library Science (108)**
  3. **Logistics and Supply-chain Management (97)**
  4. **Management (98)**
  5. **Mass-communication.**
  6. **Marketing, international marketing**
  7. **Media, advertising.**
  8. **Media & Communication Studies**
  9. **MEDIA AND EVENT MANAGEMENT COURSES**
* Bachelor of Multimedia Communication
* BBA Event Management
* BBA Media and Communication
* BA (Hons) Mass Media in Hindi
* BBA Media Management
* BA Media Technologies
* B.Sc. Visual Media
* MA Communication
* MA Media studies and Production
* MBA Event Management
  1. **Multimedia and Web technology**

**Introduction**

CBSE has introduced vocational subjects on multimedia and technology to enhance the students’ knowledge in latest technologies and trends lik, HTML, DHTML, XML, CSS, JAVA script. VB script, ASP, Photoshop, Coral draw etc. it not only increases the IT awareness but also gives the job opportunities in this field.

This course will definitely help those students who will select computer stream during their graduation after passing 10+2

Web designing courses have been gaining popularity as data visibility on the internet has become an important aspect of digitization.

There is a huge demand for designers in the market and pursuing web designing course can enhance the job prospects of candidates.

Multimedia technology includes interactive computer-based applications that allow people to communicate ideas and information with digital and print lements. Professionals in this field use computer software to develop and manage online graphics and contents.

The work that media technology specialists produce is used in various mrdia, such as training program, web pages and news sites.

**Five multimedia elements;**

(1). Text (2)image (3) Audio (4) Video (5) Animation

**Eligibility :** 10+2

**Courses**

* B.Sc. in multimedia—Degree course-3 year
* Diploma in web designing—2 year diploma
* Diploma in web designing and software development—2 year diploma
* Certificate in internet and web designing—18 month to 2 year certificate course
* Post-graduate diploma in web designing
* M.Sc. In E-commerce and web designing

**Institutions/colleges/universities**

(2) Indian School of Business and finance, New Delhi (2) Jagran Lakecity University, Bhopal,

* 1. **NGO management.**
  2. **NTTE**
  3. **Performing Arts (77)**
  4. **Philosophy**

**Introduction**

Philosophy uses the tool of logic and reason to analyze the ways in which humans experience the world’ it teaches critical thinking, close reading, clear writing, and logical analyses. It uses these to understand the language we use to describe the world and our place within.

Philosophy comes from a *Greek* word meaning “love of wisdom”

**Eligibility**

10+2 in any stream

**Courses**

BA, MA, Ph.D

**Institutions/colleges/universities**

* There are a number of colleges under DU. Getting admission in DU colleges with less than85% marks is not possible
* School of Distant Education, DU
* JMI
* AMU
* IGNOU

**3.249 Physical Education (BA & B.Sc.) (111)**

**Introduction**

Physical Education is study of bodily development, strength, physical co-ordination and agility. It is an undergraduate program. The 3-4 year duration B.P.Ed. course for 10+2 students and 1-2 year for graduates. Subjects included in the curriculum are

* Physical fitness, health related physical fitness.
* Performance related physical fitness.
* Health studies and effect of exercise
* Skeletal and muscular study.
* Analysis of circulatory, respiratory and endocrine systems
* Nutrition and health. Health promotion
* Safety education
* First aid and emergency care.
* Hypo-kinetic diseases, sports and life skills, etc.
* Ideal candidates for the course would possess competent motor skills, and movement patterns needed to perform a variety of physical activities.

**Eligibility**

* 10+2 in any stream
* Minimum aggregate of 50%
* Institutes conduct entrance test for admission.

**Courses**

D.P.Ed., B.P.Ed., M.P.Ed.

**Institutions/Colleges/Universities**

* Jadavpur University, Kolkata
* National Post Graduate College, Lucknow
* Scottish Church College, Kolkata
* Mount Carmel College, Bangalore,
* University of Lucknow, Lucknow.
* Chaudhry Charansingh University, Meerut
* And many more Institutions in different Cities.
  1. **Photography (84)**
  2. **Placement Training Program**
  3. **Printing and Packaging.**
  4. **Print-media & Communication**

1. Bachelor in Journalism (B.J)\_\_3 years

(iii) Bachelor in journalism and Mass Communication—3years

(iv) B.A. with Mass Media—3 years

(v) B.A. in Script Writing

* 1. **Private sector and Industry.**
  2. **Real Estate Training**
  3. **Religion**

**Introduction**

**Islamic studies:** It refers to the study of Islam. It can be seen under two perspectives.

1. Secular perspective

From a secular perspective, it is a field of academic research, whose subject is Islam as religion and civilization

1. Traditional Islamic perspective

From this perspective Islamic studies is an umbrella term of religious sciences ***(Ulum al Din)*** persuaded by Ulamas.

**Eligibility**

10+2 in any stream

**Courses**

BA in Islamic Studies

**Institutions/Colleges/Universities**

* Chistiya College of Arts and Science. Aurangabad
* Maulana Azad national Urdu University, Hyderabad
* Jamia Hamdard, Delhi
* Preston International College, Chenni.
  1. **Transportation and Mining-studies**
  2. **Private sector and Industry.**
  3. **Public Relations (71)**
  4. **Real Estate.**
  5. **Retailing,**
  6. **Social Worker**
  7. **Sports & Sports Management (112)**

**Introduction**

Bachelor of Sports Management (BSM) syllabus consists of topics such as Basic Statistics, contemporary issues in Sports, Ethics of Sports, Financial Accounting, Principles of leadership in Sports, Marketing Management, Advertising, Public relations and sponsorship of sports and much more.

**Eligibility**

10+2 in any stream with at least 50% marks.

**Courses**

Bachelor of sports management (BSM)

MBA in sports management

**Institutions/colleges/universities**

* MIT School of Management, Pune
* ICFAI Business School, Hyderabad
* Symbiosis International University
* Amity School of Physical Education

**Top Jobs**

* Athletic Coach
* Athletic director
* Event Co-coordinator
* Facilities manager
* And many more
  1. **Students’ welfare (Graduation and Post-graduation)**  Jamia Millia Islamia.
  2. **Technical Education.**
  3. **Theatre.**

**Introduction**

* Drama and theatre studies is an intellectually challenging and artistically rewarding subject
* The course is designed to instill a thorough understanding of both theory and practice and has plenty of scope for development-based skills.
* As the student of Drama and Theatre studies course, you will be expected to see as much live theatre as possible and to actively explore new ideas and forms of performance.

**Eligibility**

10+2 in any stream.

**Courses**

BA, MA in theatre and TV

**Institutions/Colleges/Universities**

* National School of Drama, Bahawalpur House, Mandi house, New Delhi, DU.
* Lovely Professional University (admission office—connaught place)
* ICE Balaji Tele Films—Institute of Creative Excellence, Mumbai
* Asian Academy of Films and Television
  1. **Tourism Industry.**
  2. **Transportation and Mining-studies**I.T.
  3. **Vocal and Instrumental Music (78)**

**Food Technology &**

**Hotel Management**

**3.270 Food Technology Certificate Courses**

**3.271 Diploma Courses**

* **Diploma Course in Food Science and Quality Control**
* **Diploma in Food and Nutrition**
* **Trade Diploma in Hotel Management (TDHM)**
* **Diploma in hotel management**

**(NIMS University…Shobha Nagar, Jaipur, 09413333140,)**

**3.272 Undergraduate Courses in Food Technology**

* **B.E. (Food Technology and bio-chemical Engineering)**
* **B.E. (Food Technology)**
* **B.Sc. Food Science and quality control**
* **B.Sc Food Science**
* **B.Sc. Food Technology**
* **B.Sc Microbial and Food Technology**
* **B.Sc. Nutrition, Food Service Management and Dietetics**
* **B.Tech. Food Science**
* **B.Tech Food Technology**
* **Bachelor in hotel management (NIMS, Jaipur)**
* **Bachelor of Hospitality Management**

**3.273 Post graduation courses in Food Technology**

* **M.A. Food Nutrition**
* **M.E. Food Technology**
* **M.E. Processing and Food Engineering**
* **M.Sc. Food Science and Technology**
* **M.Sc Food technology**
* **M.Sc Microbial and Food Technology**
* **M.Tech Food and Nutrition**
* **M.Tech. Food Biotechnology**
* **M.Tech Food Chain Management**
* **M.Tech. Food Engineering and Technology-integrated**
* **M.Tech Food Engineering and Technology**
* **M.Tech. Food Processing Technology (integrated)**
* **M.Tech Food safety and Standards.**
* **M.Tech. Food Technology**

**3.274 MBA Course in Food technology—2 years**

**Qualification:** Graduate, 50% marks,

**Entrance test,** CAT, CMAT, XAT, GMAT, ATM or IITTM

**3.275 Research Courses in Food Technology**

* Ph.D. Food and Dairy Technology
* Ph.D. Food Biotechnology
* Ph.D Food Engineering and Technol\*ogy
* Ph.D. Food science and Technology\*
* Ph.D. Food Technology\*
* PG Diploma in Food Ana\*lysis and Quality Control
* Ph.D. in Hote Manageme\*nt (NIMS, Jaipur)
  1. **Hotel management and food services**
* **Institute of Hotel Management Catering & Nutrition (IHM), Pusa, New Delhi**
* **Affiliated to IGNOU.**

**Entrance Review:** The exam is called JEE, conducted by—NCHMCT

**Fee about**: 2.3 lakh

**Duration** – 3-years.

* **There are 100 (or more) Management Institutes in Delhi (NCR)**
* **Food Technology (NIMS, Jaipur)**
* **Food Science & Nutrition**
* **Food Technology**

**3.277 Hotel management and food services.**

**Institute of Hotel Management Catering & nutrition (IMH), Pusa, New Delhi**

**Affiliated to IGNOU.**

**Enterence Review:** The exam is called JEE, conducted by—NCHMCT

* Fee about 2.3 lakh
* Duration – 3-years.
* 100 other Management Institutes in Delhi (NCR)
* **Hotel Management (94)**
* **Nutrition and Dietetics (110)**
* **Food Technology (40)**

**Tourism and Travel**

**3.278 Tourism and Travel**

* **Tourism and travel (113)**
* **Tourism and leisure services: *NOIDA***.
* **Tourism and International Business**
* **Indian Institute of Tourism Travel Management (IITTM): Gwalior**
* **Tourism and Travel (NIMS, Jaipur)**
* **Tourism Industry**
* **Travel and Tourism Management (12 months)**

**Different Polytechnics**

**PG COURSES**

1. **HUMANITIES**
2. **COMMERCE**
3. **SCIENCE**
4. **GENERAL COURSES**

**A. PG IN HUMANITIES**

**Purpose of studying**

* To produce committed, value based and intellectual approach that contributes to the advancement of academics and the fields related to the practical life. Subjects of studies available for study in Humanities
* Teacher (UG and PG)---In subjects such as; History, Civics, Economics, , History, Pol. Sc., English and other languages, Sociology, History;

**AVENUES OF STYDY OF HISTORY AT PG**

study of historiography (study of the methods of historians in developing history as an academic discipline)

* historical research methods, study of specific periods

**Main specializations**

* Archaeology
* Museology: the science or practice of organizing, arranging and managing museums.
* Archival studies. Most of these courses are offered at PG level. Students specialize in particular object of study and become experts in coin (numismatist), weapon sculpture, deciphering of inscriptions (epigraphist*).*

**Employment:**

* Archaeologists employed by ASI for about 3600 monuments, museums Research institutes.

**Specialized M.A. Courses in Economics**

1. M.A. Mathematical economics
2. Econometrics—Gujrat University, Ahmedabad.
3. M.Sc. in applied Econometrics—Bharathiar University, Coimbatore
4. M.A. in Economics,
5. M.A. Econometrics,
6. M.A. Rural Economics,
7. M.A. Business Economics,
8. M.A. Development Economics.
9. M.A. Econometrics—Madras University
10. MS in quantitative Economics—Indian Statical Institute, Kolkatta, Delhi. The course includes Econometrics methods.
11. MBA in Managerial Economics, Macroeconomics, Economic Legislation.

**M.A. Animation**

1. **PG COURSES IN COMMERCE**

**Cost and Management Accountant (CMA)**

**Introduction**

Cost and management accounting is a form of accounting that aims to maximize profit by managing revenues and expenses. It provides data and reports used by managers to inform their strategies around long-term profit and growth.

It aims to improve company’s profitability by managing, controlling and eliminating expenses. Cost accounting helps business helps determine the cost of products, project and processes , which shows the company where its earnings and losing money and an integral part of budget planning. Cost and management accounting provides data and analyses reports that can be used by managers to make decisions that will lead to long-term profits and growth

**Eligibility, procedure**

It’s a post-graduate course.

The very first step to becoming a cost accountant in charge of budget management is to earn a formal degree in accounting from a program that is accredited by the *Association to Advance College Schools of Business.* While some smaller employers will hire those with an associate’s degree, a majoring would prefer to hire a professional who possesses a bachelor’s degree in the discipline.

After your bachelor’s degree, you will be eligible for most junior accountant roles where you can gain experience; you can pursue your certification and becomes a certified Management Accountant (CMO).

A CMA through the *Institute of Management Accountants* have proven that they have experience and have mastered to succeed in the industry.

**Job opportunities**

More and more service companies are concerned with analyzing costs and finding a way to reduce expenditures. If you are studying and want to benefit from the high demand for professionals in this role, you should consider specializing the importance of cost management in accounting, you can then be considered a skilled candidate.

* **Certified Financial Planner – CFP**
* **Chartered Financial Analyst (91)**
* **Law graduate and post graduates (LLB & LLM)**

* **LLB**

LLB or an integrated LLB is a professional degree which is meant to enable a graduate to practice the profession. Many law graduates, however, do not remain content with just one degree. Why one should obtain a post graduate credential such as LLM or a diploma in a specific area when a “GOOD”LLB degree is enough for any position in the profession—in judiciary, administration, industry or even in academics. There are a no. of explanations and reasons given by the experts. A few of them are listed below.

* *Increase in the no. of legal conflicts both in social and professional sphere, heightened the demand of qualified lawyers in this segment of specialized law practice, such as copy right, corporate law, criminal law, regulation law, international taxation law, labor law, corporation law, patent law, administrative law etc.*

**Copy right law**

* It falls under intellectual property rights (IPR) *– Many of the fields fall under this law*; such as literature, dramatics, music, artistic works, and creation of cinematography etc.- Copy right protects the inventor, creator against any unauthorized use or misuse of his creation or invention without prior permission. It safeguards certain rights of creator or inventor.
* A career in copy right law involves the registration of copy right with the registration office and prosecution for the protection of creator’s or inventors’ rights in a court of law.
* It can be a lucrative career in India especially in metro cities. It is essential for those who want to pursue in this field of law must have a keen interest in the field of law and copy right. –Since there are no specific courses for copy law , an internship of minimum six months will gain an insight into what the career entails.

**Corporate law**

* Law pertaining to companies and corporations (shareholders, directors, and other stakeholders). -Popularity, due to increasing of business and no. of new companies corporate law is gaining popularity. This branch of law also focus on creating rules for the companies or corporations that are acquiring or being acquired by other companies, or those that are being merged, so as to avoid avoid foul business practices and ensure fair play. Corporate lawyer should also have an in-depth knowledge of criminal law so as to protect companies from any adverse effect. Its practitioner should also have a Through understanding of various laws including principles underlying them such as;

the skills to interpret them

* Effective communication skill and presence of mind.
* Students who wish to pursue a career in stream can go for an LLB degree, specializing in civil law.
* Can work with law firms
* Join the legal department or a company or an organization
* Practice independently
* Fresh entrants can earn up to Rs. 25,000/- per month.

**Criminal law**

* In India a host of laws criminalize various activities. Under these laws, the government, through law enforcement agencies and its prosecution wing, can impose a wide range of penalties on individuals found indulging in prohibited acts. A criminal lawyer can either be a prosecutor or a defense lawyer. *As a prosecutor, he has to establish the guilt of the accused on behalf of the govt. As a defense lawyer, the job is to establish that the prosecution has not established its case ‘beyond reasonable doubt’ and the client is not guilty of the offence he/ she is charge with.*

**Work avenues**

**Corporate law firms**

* practice in courts
* set up their own venture
* in academics where extensive research is being conducted
* can enter the judiciary as a judge.
* Earnings– for fresh entrants, Rs- 20,000/ month

**Internships**

* are an indispensible part of law education

Essential for supplementing the theoretical knowledge. It enables the students to understand the difference between theory and practice.

* To gain insight of the efforts in order to understand difference between theory and practice
* Prepare arguments for a case—research, drafting, and briefing— thus allowing one to be in a better position when one starts working.

**LLM**

* Characterized by fast changing professional requirements necessitated an in-depth knowledge of our respective fields. This situation gives rise to the need of specialization.
* An expertise in any field enables you to understand and handle the complexities of the concerned profession, something which is beyond the domain of ordinary graduates.
* In the era of globalization, liberalization and privatization, the government’s role is changing from being regulators to being facilitators such that domestic legal framework is rapidly changing and we, as legal professionals, have to keep pace with this dynamism’.
* Domain expertise inculcates research abilities and instills a deep understanding of a legal subject in candidates which is possible only through a PG qualification.
* University Grants Commission (UGC) insists on the LLM and National Eligibility Test score for full-time teaching positions.
* Legal education is not just about acquiring knowledge of law; it involves learning skills, professionalism, ethics as well as creative and strategic thinking abilities to solve problems at both individual and social levels.
* Some law schools offer relatively better LLBs, but finding a good LLM program is not easy. Many law students who want to pursue a post graduate degree seek fellowships or take bank loans and migrate to the UK, US, and other countries, most of which offer one-year PG law program. During the course of their program, they acquire some degree of specialize knowledge and skill in emerging areas of law useful to find a job in a law firm in that country or back in India.
* To become eligible for teaching positions or simply to add another degree to their CV.
* PG diplomas do help acquire some specialized knowledge in given areas of law. Students can obtain it through distance education at a negligible cost and help improve performance in one’s career in administration. Economic sectors, Social work etc.

**Popular specializations**

**Earlier the subject area of choice was;**

* Public law,
* constitutional law,
* international law,
* administrative law.

**Now, the rush is towards private law; including;**

* Business and trade law.
* IPR law,
* Competition law,
* Environmental law and
* Criminal law, comparative law,
* Aviation law, air transport management,
* Medical jurisprudence,
* Labor legislation,
* Corporate law, human rights,
* Taxation law,
* Family law,
* Master’s in aviation law and, air transport management,
* In space and telecommunication laws,
* In security and defense laws,
* Copyright law, regulation law,
* International taxation law,
* Insurance law,
* Patent law,
* Administrative law.

**Copy right**

* Falls under international property rights (IPR). It protects the rights of original inventers, creators, in any field and safeguards their inventions or creations against unauthorized use without prior permission.
* *It involves the registration of copy right with copyright office and protection of the interests of inventor or creator.*
* Students who wish to build a career in this stream can pursue on line courses offered by Word Intellectual Property Organization (WIPO) or Diploma courses in IPR offered by law colleges which teach copyright law as a module.
* Since there are no specific courses for copyright law, students who pursue an internship for a minimum of six months will gain an insight into what the career entails.

**M. Com**

* The Masters degree covers the study of
* Principles accounting,
* Economic theory—micro and macro economics,
* Money and banking systems,
* Business management,
* Trade and export polices.
* In the final year students may opt for a specialization in one of the fields such as statistics, taxation, accounting and finance, etc.
* M. Com. Course is suitable for candidates who want to pursue higher studies and research in this field and can complete their NET-UGC/ JR examinations and assist research work or take up a teaching assignment.
* It is also suitable for those who are keen to pursue chartered accountancy and company secretary ship;
* Those who want to do research in this field can pursue an M. Phil and PhD later.

**Choices galore for PG students**

* M.Com syllabus should ideally be dynamic on a par with the changing scenario, the marketing curriculum especially, needs to be regularly updated and restructured.
* Entrepreneurship: This will help them multiply employment opportunities, opportunities in society and be the catalyst for change in economy.
* CA, CS and CFA, coupled with a PG degree, gives students good option even today.
* Investment management, auditing, tax planning, corporate banking, global banking, corporate governance etc.
* MBA in finance, marketing or human resource.
* E-commerce, fundamentals of computers, business data processing, ERP, software development etc. give an extra edge
* An M. Phil or PhD after completion of a Master’s degree

1. **PG COURSES IN SCIENCE**

**Current research scope in science**

Students intending to pursue PhD programs in science and engineering have a wide range of opportunities in India today’

* over th last decade, there has been a significant growth in the number of programmes that provide support for students to pursue research degrees.
* Entry to research programme is facilitated when students qualify through the CSIRNET and GATE examinations, which are conducted on all India basis.
* Opportunities in pure sciences have grown in recent years with the establishment of five Indian Institutes of Science, viz;
* Education and Research located at Pune, Kolkata, Mohali, Bhopal and Thiruvananthapuram.
* The creation of several new IITs and Central Universities has also expanded available research opportunities.
* In addition to universities, both state and central, a large number of National laboratories of the Council of Scientific and Industrial Research, Department of Biotechnology and Department of Science and Technology, admit a number of research students every year.
* Employment opportunities for students who acquire PhD degree are also growing since there is a substantial increase in the number of academic faculty positions, which are available across the country.
* The introduction of DST-INSPIRE Faculty Fellowship Program and the UGC’s Faculty Recharge Initiative provide avenue for post-PhD employment.
* Research areas that appear to be particularly attractive for the future lie at the interface of multiple disciplines.
* Students obtaining Bachelor’s and Master’s degree in a specific subject have a great opportunity to migrate to these inter-disciplinary areas.
* As an example the Indian Institute of Science at Bangalore provides admission to inter-disciplinary programs in the areas of mathematical biology, bioengineering, nanoscience and engineering and energy studies.
* Several rapid expanding areas like neuroscience, earth science and chemical and systems biology can accommodate students from diverse branches of science, engineering and medicine.

**Industry view**

* Traditionally the sectors most active in Research & Development in India have been pharmaceutical, fine chemical and the automotive sector. However, now there is a broader interest across many sectors—from machine tools and cement to electronics and healthcare. There has been rapid growth in multinational R&D labs based in India, along with their Indian counterparts. The number of students wanting to pursue PhD is increasing. This is reflective of the opportunities available for those with a PhD qualification

.

**Master of Computer Applications, MCA, (Delhi University);**

**Duration**: 2 years

**Eligibility**:

* Any Bachelor degree, with at least one paper in
* Mathematical sciences (mathematics, computer science, statistics, operational research), under annual mode
* At least 2 papers in mathematical sciences (mathematics, computer science, statistics, operational research) in semester mode or an equivalent degree.
* At least 60% marks in aggregate at graduation level.
* Candidates who are appearing in final year examination are also eligible to apply.

**M.Sc. Computer Science (Delhi University);**

**Duration:** 2 years

**Eligibility:**

* B.Sc. applied Physical science with mathematics and computer science,
* B.Sc. (general) mathematical sciences(10+2+3) with mathematics and computer science from Delhi University or at least 6papers in computer science and 2 papers in mathematics under semester system.
* More details and Form on;
* Website; <http://cs.du.ac.in/>

**Computers**

* **Super-specialized Computer Science,**
* **Electronics and Communications (with specialization in cloud**

**computing and virtualization technology)**

* **PG in Geo-informatics**
* **M.Sc. in Green technology.**

**Faculty of Medicine & Health Services (PG courses in Medical Science)**

1. **M.Sc. Bio-technology.**
2. **M.Sc. Geo-science,**
3. **M.Sc. Medical Anatomy**
4. **M.Sc. Medical Biochemistry**
5. **M.Sc. Medical Pharmacology**
6. **M.Sc. Medical Physiology**
7. **M.Sc. Medical Microbiology.**
8. **MD Anesthesiology**
9. **MD Biochemistry**
10. **MD Community Medicine**
11. **MD Anatomy**
12. **MD Dermatology, venerology and Leprosy**
13. **MD Forensic Science**
14. **MD General Medicine**
15. **MD Microbiology**
16. **MD Pediatrics**
17. **MD Pathology**
18. **MD Pharmacology**
19. **MD Psychiatry**
20. **MD Physiology**
21. **MD Radio-diagnosis**
22. **MD Respiratory Medicine**
23. **MD Radiology**
24. **Master of Public Health**
25. **Master of Social Works**
26. **MS Obstetrics & Gynecology**
27. **MS Ophthalmology**
28. **MS Oto-Rhino-Laryngology**
29. **MS Orthopedics**
30. **MS General Surgery**
31. **MS Medical-anatomy**
32. **Ultra Sonography- 4D (Institute of Public health & hygiene, 011-26782850)**

**Faculty of Physiotherapy**

1. **Master of Physiotherapy** (cardiopulmonary)
2. **Master of Physiotherapy (Neurology)**
3. **Master of Physiotherapy (Orthopedics)**
4. **Master of Physiotherapy (Sports)**
5. **Master of Physiotherapy (Community Rehabilitation)**
6. **Master of Physiotherapy (Gynecology & Obstratics)**
7. **Ph.D. Neurology**
8. **Ph.D. Cardiology**
9. **Ph.D. sports**

**Faculty of Nursing**

1. **M.Sc. (Child-health--Pediatrics Nursing)**
2. **M.Sc. (Obstetrics’ & Gynecology)**
3. **M.Sc. (Psychiatric—Mental Health)**
4. **M.Sc. (Medical—Surgical Nursing)**
5. **M.Sc. (Community Health Nursing)**
6. **Ph. D. Nursing**

**Faculty of Health Allied Sciences**

1. **Master of Optometry**
2. **M.Sc. Nutrition & Dietetics**
3. **M.Sc. Radio-imaging Technology**
4. **M.Sc. Operation Theatre Technology**
5. **M.Sc. Medical Lab technology**
6. **M.Sc. Micro-biology**
7. **PG Diploma in MRI**
8. **PG Diploma Ct Scan**
9. **Ph.D. Nutrition & Dietetics**

**M.Tech.**

1. **M.Tech.** **Nuclear Engineering**
2. **M.Tech. Aerospace**
3. **M.Tech. Oil and Gas, Energy & Power—**2years, NIMS University, jaipur.
4. **M.Tech. Civil Engineering**
5. **M.Tech. Computer Science & Engineering**
6. **M.Tech. Electronics & communication Engineering**
7. **M.Tech. Mechanical Engineering**
8. **Master of Computer Application (MCA)**

**Advanced Engineering**

1. **PhD. Computer Engineering**
2. **PhD. Computer Science & Engineering**
3. **PhD. Electronics & communication Engineering**
4. **PhD. Mechanical Engineering**

**Master of Dental Surgery and Ph.D. in Dental Science**

1. **Conservative Dentistry & Endodontic**
2. **Oral & Maxillofacial Surgery**
3. **Oral Medicine & Radiology**
4. **Oral Pathology and Microbiology**
5. **Prosthodenties and crown and bridge,**
6. **Periodontolology,**
7. **Conservative dentistry,**
8. **Orthodontics and Danto Facial Orthopedics**
9. **Public health and dentistry,**
10. **Paedodentics and preventive dentistry,**
11. **Master of Pharmacy**
12. **Ph.D.**

**Business Administration**

**Business Administration**

**Management (MBA and further studies in India and abroad)**

1. **MBA (and advance study)**
2. **MBA Health Care Services**

**(011-26782850, 26788314, 26786847, 9811817972,9654513469)**

1. **MBA (Supply chain and logistics)**
2. **MBA Hospital Administration**
3. **MBA Economic Legislation**
4. **Management Studies**
5. **Managerial Economics**
6. **Quantitative Technique I & II**
7. **Master ob Business Economics**
8. **M.phil (Management/Administration)**
9. **PhD (Management and Adminisraion)**

**Foreign destinations**

* Though studying in a foreign country can be an enriching academic experience, it is imperative that student select the right program and country. (a complete guide is compiled separately).
* Name of country
* Names of its Universities
* Duration of the course
* Eligibility criteria
* Information regarding the start of session
* Information regarding expenditure
* Financial assistance
* Assistance for getting admission

**EDUCATION COURSES**

**Education Courses**

* **Teachers’ training (B. Ed; M. Ed; M.A. (education and research in Education)**
* **Diploma in Elementary Education (100)**
* **Education management.**
* **Sports and Sport education**

**(D.P. Ed, B.P.Ed, M.P.Ed, *Delhi, Lucknow* )**

* **DIET**
* **Educational/vocational School Counselor**

1. **Montessori Teaching (109)**
2. **Technical Education**

**Integrated Courses**

* **B. Pharma+ MBA (Dual Degree—NIMS University)**
* **BCA+MCA—5 years..**
* **B. tech+ MBA ……….. 5 years**
* **B.Sc. + M. Sc ………….. 5 years**
* **B. Sc+ Agriculture + Food- business ……. 5 years**
* **BBA+MBA (Integrated)------(all above…NIMS University, 09571703917, 09829051020)**

**JOB OPPORTUNITIES AFTER UG & PG**

**Civil Services, IAS, IPS, IRS, IRS, etc--Conducted by (UPSC)**

**Civil services Examination**

It is a nationwide competitive examination in India conducted by Union Public Service Commission for recruitment to various Civil Services of Government of India including Indian Administrative Services (IAS), Indian Foreign Services (IFS), and Indian Police Services (IPS)

**UPSC Examination:** it is conducted in three phases – a Preliminary Examination consisting of two objective-type papers (General Studies Paper I. and General Studies Paper II also popularly known as Civil Services Aptitude Test CSAT) and a main examination consisting of nine papers of conventional type (essay type), in which two papers are qualifying and only marks of seven are counted followed by a personality test (interview)

**Process:** The Civil Service Examination is based on the British Raj-era Imperial Civil Service tests conducted by old Indian Empires such as in the Maryann Empire and Munhal Empire. It is considered to be one of the most difficult competitive examinations in India. on average, 9,00,000 to 10,00,000 candidates apply every year and t+he number of candidates sitting is approximately 5,00,000.

**Stage I:**

**Preliminary Examination** held in June every year **results** are published in mid August

**Stage II: Mains**

* Examination held in October every year. Results are announced in January.
* Personality test (interview) - held in March. Final results are usually announced in May.
* The training program for the selected candidates usually commence the following September.

**Eligibility**

* Must be an Indian Citizen
* A Citizen of Nepal or Bhutan
* A Tibetan refugee who settled permanently in India
* A person of Indian of Indian origin who has migrated from Pakistan, Myanmar, Sri Lanka, Kenya, Uganda, Tanzania, Zambia, Malawi, Zaire, Ethiopia with the intention of permanently settling in India.

**Educational Qualification**

* A degree from central, state or a deemed university
* A degree received from correspondence
* A degree from an open university
* A qualification recognized by the Government of India as being equivalent to one of the above.
* Candidates who have appeared in ann examination the passing of which would render them educationally qualified enough to satisfy one of the above points.
* Candidates who have passed the final exam of the MBBS degree but have not yet completed an internship.
* A degree from a private university
* A degree from any foreign university
* The candidates who have passed the final exam of ICAI, ICSI, ICWAI

**Age limit (August, 1)**

* 21 years to 32 years – for general category
* 37 – for SC/ST
* 40 years – for defense service personals disabled in operation during hostilities.

**Number of attempts**

* General category – 6
* OBC ------------------ 9
* SC/ST ----------------- no limit till 32 years
* Appearing to attempt one of the papers in the preliminary examination is counted as an attempt including disqualification/ cancellation of candidature
* However, applying to sit in the exam but, failing to attend is not counted as an attempt.

1. **Army, Navy**
2. **Detective (102)**
3. **Flight Attendants (Cabin crew)**

**JOINING THE INDIAN AIR FORCE (Combined Defense Service Exam)**

Eligibility: Bachelor’s in any stream with Math and Physics in Class 12th.

No minimum percentage is specified.

19-23 years age

Only men are eligible

CDS is conducted twice a year (February and August)

Notification appears on the official UPSC Website (<http://careerairforce.nic.in>) as well as in leading dailies and Employment News

**Flying Officer (Pilot) through Short Service Commission**

**Eligibility:**

* Tech. with 60% marks
* 19-23 years
* Only men

**Notification in December and June in Employment News and National Dailies.**

**Direct Entry Scheme as a Flying Officer:**

* Eligibility for Flying Officer is Aeronautical Engineers (electronics) is a B.Tech. with 60% marks.
* 18-28 (if married)---18-25(if unmarried)
* Both men and women are eligible.
* Notification in December and June in Employment News and other national Dailies.
* Aeronautical Engineering deals with Developing. Constructing, Designing, Maintaining and Operating missile and military aircrafts.
* Computer technology is used to enhance the learning process
* Aeronautical Engineering also involves the aerospace Engineering dealing with both aspects of Spacecraft and Aircraft

**Police.**

* **Age—18 to 21 years**
* **Qualifications—**10+2 (from a recognized institution)
* Height—minimum 170 cm
* **Chest**: minimum 81cm to 85 cm (with minimum expansions of 4 cms.)
* **Sub-inspector in DP.**
* **Qualification:** Graduation
* **Selection:** through Staff Selection Commission (SSC) through graduate Level **Examination under central armed police forces** (CAPF) which covers all the Para Military Forces of the Country.

**Career opportunities available in DP**

* Constable
* Ministerial cadre
* Sub-Inspector
* Assistant Commissioner of Police

Recruitment 2019,

Notification—15000 vacancies

Form, apply on line: www.delhipolice.nic.in

10th pass and 12th pass

Age: 18—30 years

All details are available at official website:

delhipolice.gov.in

delhipolicerecruitment.nic.in

height: minimum 165 cm.

chest: minimum: 76 cm (unexpended) &80 cms expended

1. Physical Standard Test (PST)
2. Physical Efficiency Test (PET)
3. Written Examination (OMR based or CBT based)
4. Personal Interview (PI)
5. Document Verification (DV)

**They are required to appear for physical examination, written test and intervie**

**Pilot**

**Introduction**

* To become a Commercial Pilot, one must possess CPL (Commercial Pilot License).
* This license is issued after a candidate clears the training program from an institute recognized by Civil Aviation Authority of that country, DGCA in case of India.

**Qualifications**

* 10+2 (PCM)
* Minimum marks: 50%

**Fitness Standards**

* A commercial Pilot has to be fit physically and mentally.
* That’s why during the selection process, lots of emphasis is laid on the medical status of the candidate.
* Here are some medical standards set by authorities, which interested candidates have to satisfy in order to get selected into CPL training program;

1. **Class I Medical certificate is needed before joining the CPL.**
2. **Eyesight specifics—one eye has to have perfect eyesight, without any defects (6/6). It is allowed to have certain imperfections in the eyesight of the other eye (6/9)**. **But, this imperfection should be corrected to 6/6.**
3. **Candidate must not have any serious physical deformity. Also he/she should not have any kind of mental disorder, or any history of having such mental illness.**

In case you have passed 12th Science, you may join the CPL training program if you meet the above mentioned educational and medical standards. You may approach private institutes, fill forms and get started.

Most institutes have a **Pilot Aptitude test,** which a candidate must clear, in order to get selected. The Aptitude test is a **3 stage process** comprising of

1. **Written Examination**
2. **Interview** and
3. **Aptitude Test.**

* The written examination deals with subjects like, **Mathematics, Geography, General Knowledge, English Skills etc.**
* Candidates who manage to clear these two stages are called for the third stage. **Medical examination** is conducted.
* Finally, a merit list is prepared, based on the performance of candidate in each stage of the selection process as well as the medical examination.
* Based on merit, deserving candidates will be selected and trained to become Commercial Pilots.
* Once selected for the CPL training, students with no prior flying experience are given Ab initio CPL training.
* The duration of the entire program may vary from one institute to another.
* On an average, it could last anywhere between 15—18 months
* Most flying schools offer combination of **ground Training** and **Flying Training. Simulator Training** is also given to candidates.
* Ground Training consists of subjects like Air Navigation, Aviation meteorology, Air Regulations, RTR, Aircraft General and technical knowledge.
* Flying Training, at first, will be supervised. A flight instructor will assist and guide the candidate at start.
* To obtain the CPL, a candidate must complete **200 hours** of flight time. This flight time is usually made up of time; as pilot in command; instrument time and flight time by night.
* After clocking the required flying hours, one may apply for CPL.
* After passing the exam held by DGCA (subjects are –Air navigation, Air regulation, Aviation Meteorology, Aircraft technical & General Knowledge and Aircraft Specific Knowledge), successful candidates will be awarded the **CPL.** Passing marks or percentage for these exams held by DGCA are 70%
* Once a candidate completes the training and has the CPL he/she may apply for job at commercial airlines or charter companies.
* But, possessing CPL is not the end of it!
* After getting CPL, you may also have to spend money for type rating.
* Based on the airline that you join and the aircraft you will fly, you will be given specific training (keeping that aircraft in mind). You will be asked to pay expenses of this **type rating** by the airlines.
* Airlines these days prefer pilots possessing the **ATPL** (Airline Transport Pilot License).
* For possessing the ATPL, candidates must have at least 1500 hours of flight time under his/her belt.
* He/she also has to pass 4 of the exams mentioned above.

**Current trends in the insurance Sector:**

* According to the Insurance regulatory and development Authority, the premium collected by Indian Insurance increased substantially during last couple of years.
* The Indian insurance industry is bifurcated into many segments, due to which there is an abundance of jobs for graduates.
* It has 52 insurance companies, of which24 are in “Life Insurance” business 28 are non-life insurer.
* Stakeholders in the market include agent (individual and corporate), brokers, surveyors and third party administrators serving health insurance claims.
* Additionally with various innovations catering to the market need, newer jobs are constantly on offer.
* For instance, traditionally, the areas covered under insurance included ,life insurance, pensions and education plans for children.
* However, people can now insure their weddings (against cancellation) as well.
* Beside core insurance functions, there are various job opportunities for fresh candidate in areas such as sale, operations, IT and finance.
* Opportunities that require candidate to identify new channels for expanding insurance and strengthening the existing channels also exist.
* A bachelor’s degree is a minimum requirement to be eligible for insurance kob in India.
* More importantly what companies look for in graduates is a knack to sell.
* Most companies however, conduct an orientation for fresh recruits to acquaint them with how the industry functions and train new employees in the fundamental skillsthey would need on the job.

**Master of trade (Stock brokers)**

* Stock brokers are involved in buying and selling shares for clients for a commission.
* There are some big brokerage firms, however, who do not restrict themselves just to shares. They offer mutual funds, insurances, currencies, and other financial products as well.
* Fresh Graduates/post-graduates get jobs as assistant relationship managers (ARMs) and relationship managers (RSM).
* They are required to be in constant touch with the clients, inform them of market movements and advise them on the amount of risk they should take.
* Becoming a sub-broker or a franchise of a big brokerage company is an option.
* As a sub-broke you will need to deposit a certain amount of money depending on the volumes you plan to handle.
* It is not easy to become a full-fledged broker, as the card which allows you to trade is quite expensive.

**Getting there**

* Most brokerage firms hire ARMs and RMs from noted MBA institutes.
* In addition to your business degree, you could arm yourself with certificates such as National Stock Exchange’s certification in financial markets and the Bombay Stock Exchange certification on derivatives exchange.

**Institutes and ORLS**

* BSE Training Institutes Mumbai ([www.bseindia.com](http://www.bseindia.com))
* National Stock Exchange Mumbai (nseindia.com)
* Institute of Company Secretaries of India, New Delhi ([www.icsi.edu](http://www.icsi.edu))
* Institute of Chartered Accountants of India, ND ([www.icai.org](http://www.icai.org))
* **Skills/traits**
* You should understand the pulse of the Sensex and Nifty.
* Trust and integrity, otherwise you can hurt the client’s prospects and the Company’s reputation.
* You deal with people’s life savings, so giving the right advice is critical.

**Pros and cons**

* The Stock Market is directly connected with economic growth, so higher GDP means higher salaries.
* One mistake can cost clients heavy, so pressure is high.
* The work can affect family life.

**The payoff**

* A relation manager with an MBA in finance can draw 6 lakhs or more depending on the firm.
* Non-finance RMs earn less.
* A good RM can rise to become a team leader, a zonal manager of a branch.

**Cluster Innovation Centre (CIC)** [**www.cic.du.ac.in**](http://www.cic.du.ac.in) **or www.du.ac.in**

UG admissions. (B.Tech; BS innovation with Math; B.Tech. Humanities)

A flagship centre of university of Delhi started in 2011, with the aim of inter linking academia, society and industry through innovative activities offer undergraduate programmes B.Tech; BS innovation with Mathematics; and IT and B.Tech humanities (under Meta College concept)

Students enrolled in any of the regular courses at the University are eligible to apply for admission to the B.Tech/BS innovation in Mathematics and IT.

To apply for B.Tech. humanities, a student needs to be enrolled in any programme of study in any college, School of Open learning or Non-Collegiate Women’s Education board. The enterence examination forms are available since mid June of the academic session.

Admission to these courses is through a written exam followed by an Interview of the short listed students. Forms can be taken from CIC or downloaded from the web site.

**What is DAIRY Management?**

We love all the things milky, be it ghee, paneer. khoya, butter and various other milky products. So, it is not surprising that India in one of the largest producers in the world.

Whereas the Dairy technology is concerned with obtaining and processing milk and milk products Dairy management involves the principles and processes for managing the dairy industry. Dairy management professionals manage the entire gamut of activities involved in processing milk into diverse products besides its transportation and distribution etc. in recent years, the inclusion of technology and management principles in the dairy sector has made it more professional, setting the stage for dairy management professionals.

* Dairy technology and management courses are offered in many universities (mostly agricultural universities) in the country.
* 0These are designed to equip students with basic knowledge of production, design and management of the industry.
* The curriculum covers areas such as entrepreneurship, involving milk conservation, dairy processing and farm management as well.
* Standalone courses in dairy management are relatively fever.
* The principles of dairy management typically are covered in PG level programs in Dairy engineering and dairy economics.

# AGRI-FORCE

# Indira Gandhi National Open University (IGNOU) school of Agriculture offers a six-month post-graduate certificate program in agriculture policy to develop human resource for planning, development and implementation of National policies in agriculture.

# The program, which is also offered on line ()[www.ignouonline.ac.in/soa](http://www.ignouonline.ac.in/soa)), covers various aspects essential for policy formulation to achieve overall economic development of the country. The curriculum addresses the factors related to the agriculture development process in India, farmers’ plight, their intellectual property rights issues in case of plant breeding and others, and research opportunities.

**EARTH SCOPE**

* Earth science is the broadest in scope among the natural sciences.
* Brock (land), ocean, air and living organisms interact through physical, chemical and biological processes that move materials and energy on the Earth.
* This subject thus gives full understanding of the natural world we live in.
* Geo-sciences address ideological challenges and social issues.
* Vital industries like oil and mining need interaction with geoscientists for their developments.
* Hence, there stands a need to build strong departments of Earth science with sustained leadership.

**Subject Areas**

* Geosciences falls under three categories

1. Academic/research (for example, understanding origin and distribution of resources).
2. Developmental (making roads, bridges, dams etc.).
3. Awareness (global warming, climate, water and environment).
4. **Academic scenario**

* The subject is offered after 10+2, although some knowledge about rocks, fossils and environment is integrated into general science courses in schools.
* Standardized tests for colleges do not list geosciences.
* In some universities, the subject is introduced at the undergraduate level with other science subjects.
* Postgraduate education in earth science leads to an M.Sc. in Geology /Geo-physics.
* IITs at Kharagpur, Mumbai, Roorkee and Bhubaneswar have full flagged departments of earth sciences where admissions are made on the basis of JEE results.
* Earth science is a part of BS-MS five year duel degree programme in some of the recently-established IIRSER (Indian Institute of Science Education and Research), particularly in Kolkata, Mohali and Theruvanathapuram.

# Off-beat careers

# Generation today, have a pool of options to choose from depending upon their interest, skills and personal characteristics. Some people are not comfortable for the traditional careers and work place. They have a desire to do something different from the regular ones. Unconventional careers are becoming more and more popular with majority of individuals opting for these challenging opportunities with a will to make an impact in this ever changing and growing world.

# Considering various occupations, there will be a significant amount of growth between now and coming next 10 years. Let us look at some interesting careers which are paved by the passion of the out-of-the-box thinkers.

# Cartoonist

# Cartoon Animators are generally required to have a bachelor’s degree in animation, graphic design or fine arts with certain skills and practical experience. Cartoon animators work in the entertainment, design and advertising industries. These professionals combine their drawing skills with art techniques to create television shows, animated commercials, and other products. A bachelor’s degree is usually required in order to become a cartoon animator, and most employers require submission of a professional portfolio as well.

# Calligrapher:

# Calligraphy is a visual art, but one who is dedicated solely to the creation of text. It is in high demand in the areas such as wedding stationery; font and logo design;and even for the creation of inscriptions and historical documents. In fact as we move towards a world where ever increasing amount of text appear online, the hand written word seems to be more highly celebrated than ever before. *The word calligraphy is formed from two Greek words, ‘kalli’ i.e. beautiful and ‘graphy’ means writing.* “The beautiful writing”.

# System Analyst

# Most employers require system analyst to have at least a bachelors degree in computer system analysis, computer science, computer information systems, management information systems, business intelligence and the similar fields. they are the big thinkers in IT. These professionals analyze an organization’s current computer systems and procedures, and recommend strategic changes to increase productivity, reduce costs and accomplish other business goals. The system analyst’s prime directive is to maximize the return on investment (ROI) of an organization’s IT spends.

# Food blogging

# Food blogging represents a complex interweaving of “foodie” or gourmet interest in cooking with those of blog writing and photography. The majority of blogs use pictures taken by taken by the author himself/herself and some of them focus specially on food photography. There are different types of food blogging. Bloggers cook extensively; and from a blog that documents highly authentic recipes or experimental food or just about anything that one is cookin

# Jewelry designer

# Becoming a jewelry designer give you the freedom to express yourself creativity, and share your designs with the world to enjoy. You have the opportunity to be self employed or work for reputable jewelers. It is your choice to learn the trade through on-the-job training or gain formal training at a school. This job is perfect for driven people who need a way to share their creativity and style others.

# Fitness experts/personal trainer

# There are thousands of people who are passionate about health and fitness and considering a career change. It ia a better option, if they have a degree and they know or learn about the biochemistry, anatomy and exercise physiology. Getting a certificate as a personal trainer may be the other option. Unlike in certain other fields, there are no predetermined paths in fitness. In other words, there is no single or obvious path to becoming a successful health and fitness coach. But, you can create your own unique path to the dream job you want.

# Travel planners.

# If you want to start a successful independent travel agency

# Connect with a host agency. One of the best tips is to connect with a host agency to begin a career as an independent travel agent.

# Make sure that you get the necessary training

# Develop a Niche Market.

# Become the expert

# Give your customers the service you may want for yourself.

# Skin-care specialist: A Cosmetology Education

# As an inspiring skincare specialist or esthetician, you need an education, but not a traditional college degree like an associate’s, bachelors or master’s degree. Instead you will need specialized training in the field of professional skincare training school.

# Athlete trainer

# An Athlete-trainer requires a bachelor’s degree or preferably a master’s degree in athletic training.

# Gaining of experience is recommended

# Obtain certification and licensure

# Degree level: bachelor’s or master’s

# Degree field: Athletic training

# Training/experience: clinical field training constitutes experience for entry-level positions.

# Certificate: enquire, if a certificate is required

# Key skills: Decision making; communication; interpersonal skills; detail oriented; compassion

# Some of the occupations listed above require years of training and experience. Those who join these professions after 10+2 can easily make the way into any of these careers and find as the experience grows, provided there exists a zest for it. In other careers a UG or PG degree is required.

**Top 10 Business Schools/Institution in India**

1. **IIT------------Amedabad**
2. **IIT-----------Kolkatta**
3. **IIT------------angalore**
4. **Xavier labour Relations Institute--------Jamshedpur**
5. **Indian Institute of management----------Lucknow**
6. **IIM-----Kozhikode**
7. **Management Development Institute------Gurgaon**
8. **Faculty of Management Studies-------University of Delhi, Delhi**
9. **Amity Business School, Noida**
10. **Pri. LN Welingkar Institute of Management Development and Research, Mumbai**

**Rank--12. Jumnalal Bajaj Institute of Management studies, Mumbai (Rank-12)**

**Rank--13. Indian Institute of Foreign Trade, Delhi (Rank-13)**

**Rank--18. International Management Institute, Delhi (Rank-18)**

**Rank--19. Institute of management Technology, Ghaziabad (19)**

**Rank--28. Institute of Management Studies, Ghaziabad (28)**

**Rank--32. Delhi School of Management, Delhi Technological University (32)**

**Rank--35. FORE School of Management, Delhi (35)**

**Rank--37. Department of Management Studies, IIT (37)**

**Rank--48. Lal Bahadur Shastri Institute of Management, Delhi (48)**

**Rank--49. Faculty of Management Studs, Manv Rchna Intitutional Univrsty, Faridabad (49)**

**Rank--50. Jagan Institute of Management Studies (JIMS), Rohni, Delhi (50)**

**B.Tech Colleges in Delhi**

* **IIT Delhi**
* **Netaji Subhash institute of Technology, New Delhi.**
* BE in Computer Engineering……………….. 1.41 lakh/annum
* BE in Information Technology ……………..……………..do…..………... .
* BE in Electronics & communication Eng..…………….do………………....
* BE in Bio-technology………………………………………..….do…….......
* BE in Instrumentation and Control Eng. ………….…..do…………………
* BE in Manufacturing Process & Automation Eng….do…..………………..
* BE in Mechanical Eng…………………………………………..do…...…..
* **National Institute of Technology**
* **Ambedkar Institute of Advanced Communication Technologies & Research**
* B. Tech in Computer Science
* B. Tech in Electronics & communication Eng
* B. Tech in Computer Science & Eng (lateral entry)
* B. tech in Electronics &Communication Eng (lateral entry)
* **Bhagwan Parshuram Institute of Technology, New Delhi**

**(affiliated to Guru Gobind Singh Indraprastha University)**

* B.Tech Computer Science &Engineering, 120 seats
* BT in Elec. & Commu. Eng. 120 seats
* BT in Elect. & Electronics Eng 60 seats
* BT in IT, 60 seats
* **Northern India Engineering College, ND.**

**(affiliated to Guru Gobind Singh Indraprastha University)**

* BT in Civil Engg, 120 seats, 44,000/annum
* BT in Mech & Auto Engg (2nd shift also) seats 180, Rs.44,000/annum
* BT in Com Science & Engg seats 120, Rs. 44,000/annum
* BT in Electronics & Communication Enngg. Seats 180, Rs.1.02/annum.
* BT in Ele & Electronics Engg seats 120, Rs44,000/annum
* BT in IT seats 120, Rs.44,000/annum
* BT in Electronics & Communication (2nd shift), seats 60, Rs. 44,000/annum
* Bt in Ele & Electronics (2nd shift) seats 60 Rs.44,000
* BT in Mech Engg, seats 60 , Rs 44,000/annum
* And many more
* **Jamia Hamdard, ND**
* BT in Food Tech seats 30, Rs. 37,000/annum
* BTin Comp SC & Engg Rs. 37,000/annum
* BT in Electronics & Communication
* **Inderprastha Institute of Information & Technology, ND (11 courses)**

**(affiliated to Guru Gobind Singh Indraprastha University)**

* BT in Comp Sc. & Engg seats 110, Rs.1.17,000/annum
* BT in Elecs & communication seats 80, Rs.1.17,000/annum
* 9 more.
* **Ch. Brahmprakash Government Engg.College (6 courses of 4 years each are offered)**
* BT in Civil (lateral entry also)
* BT in Environmental Engg.(lateral Entry also)
* BT in IT (lateral entry also)
* **Delhi Institute of Tool Engg.(DITE)**

**(affiliated to Guru Gobind Singh Indraprastha University)—5 courses offered**

* BT in Mechatronics. Rs. 60,000/annum
* BT in Tool Engg. Rs.60,000/annum
* And others
* **JMI. Jamia Nagar**
* **Centre for Civil Aviation Training (CCAT), ND**

**(Approved by DGCA)**

* BT in Aircraft Maintenance Engg Rs. 85,000/annum
* BT in Aeronautical Engg Rs.79,000/annum
* BT in Aircraft Maintenance Engg. Rs.85,000/annum

**CAT**

**(Aspirants should make planned efforts to maximize their chances of success)**

The common admission test (CAT) is a computer based test held in India… the Indian Institute of Management (IIMs) started this exam and use the test for selecting students for their Business Administration Programs. The test is conducted every year by one of the IIMs based on the policy of rotation.

* CAT aspirants should make planned efforts to maximize their chances of cracking it.
* The first task of any aspirant is to complete the basics in all the test areas at the earliest possible but preferably not later than 30 days before they take the CAT.

**Basics include**

**Quantitative Ability:**

Quant:

* arithmetic, basic algebra, geometry and mensuration, and modern maths

Data Interpretation:

* Tables, line, bar and pie charts, routes and networks etc.
* After the basics students should focus on solving questions that require application of the knowledge under severe time pressure.
* They should also practice to built skills in using alternative methods to solve questions like option judging, elimination of unlikely options, substitution of numerical values etc.
* They should also build speed by solving questions using mental calculations and visual observation.

**Verbal ability**

Logical Reasoning:

* Calendars, clocks, cubes, syllogisms, Conditional Statements, Venn Diagrams, Maxima-Minima, Binary Logic, Games and Tournaments, Logic Puzzles, etc.

**English Grammar basics:**

* Reading, comprehension (RC)- reading on various different subjects on line.
* Vocabulary: consulting the dictionary regularly to know the contextual usage of unfamiliar words/usage.
* Data interpretation and logical reasoning areas are skill-intensive.
* Hence practice and more practice will help you to sharpen your skills.
* Verbal areas require you to have strong fundamentals in grammar.
* A good vocabulary and a varied reading habit are a must to do well in RC.
* This is also an area where you may get into trouble due to more wrong answers and negative marks, so you have to be on your guard.
* Once your basics are more or less in place, you should take plenty of mock tests that are similar to the CAT and are taken by a large number of students.

**Mock tests play a crucial role in**

* Understanding your relative strengths and weaknesses vis-à-vis other test takersso that you can work on the same and improve.
* Fine tuning your time management and question identification skills that help you to attempt maximum possible questions.
* Understanding the reasons behind your mistakes so that you do not repeat these again.
* Developing stamina and temperament for a 140-minute computer based CAT.
* Use the last one month before the CAT to take and thoroughly analyze your performance in each mock test so that you are ready to take the actual test confidently.

**On line course for free**

* [www.courser,org](http://www.courser,org)
* [www.udacity.com](http://www.udacity.com)
* [www.edx.org](http://www.edx.org)
* [www.ietsintern.com](http://www.ietsintern.com) (intern in the field of your choice)
* [www.hellointern.com](http://www.hellointern.com) (intern in the field of your choice)

**Gap year**

* Taking a year off gives the freedom to experience different fields.
* Make a list of all the things you find interesting and priorities.
* Make a proper schedule for the day for maximum utilization of time.
* Join an online course for free.
* For intern ship opportunities visit any of the above web site.
* Pursue a hobby of your choice.
* Travel and meet the people from varied background.

**CMAT: THE SECOND MOST IMPORTANT TEST AFTER CAT**

* The common Management Admission Test (**CMAT**) conducted by All India Council for Technical Education, has become the second most important test after the CAT for MBA aspirants.
* First conducted in Feb, 2012 CMAT is a computer based multiple-choice, objective-type test that takes place twice a year. As per the latest XAT exam pattern, the exam will be on line based with a time period of 3.5 hours. From academic year 2020-21 onwards, the CMAT exam will be conducted only once a year in January.
* CMAT has replaced a large number of state entrance tests in states such as U.P. (UPSEE), Kerala, Maharashtra (MCET), Rajasthan (RMAT) etc. scores will be used by more than 2000 B-schools in India including top b-schools like Jamnalal Bajaj, Mumbai.
* CMAT is a 180-minute test having 100 questions divided into 4 sections;

1. Legal reasoning
2. Verbal ability
3. Numerical ability- data interpretation
4. General awareness

* Each section includes 25 questions, each with 4 options, the right answer will get you 4 marks while 1 mark is deducted for each wrong answer.
* While CMAT syllabus is similar to CAT, except general awareness.
* It is perceived to be relatively easier test than the latter.
* Good preparation for general awareness is a must to get a good score.

**EXAMAMS REQUIRED TO STUDY IN US**

**SAT**

Introduced in 1926, its name and scoring have changed several times

* **Originally called: Scholastic Aptitude Test,** later
* **Scholastic Assessment Test:**
* **Then SAT reasoning Test,** and now simply the **SAT.**
* It is needed for admission to most US Colleges.
* A few colleges in Singapore and Canada.
* SAT consists of **writing, critical reading,** and **Math.**
* Maximum score for this exam is 2400.
* A separate writing section on 12 is also a part of the exam.
* You can take the SAT as many times as you like and send only your best score.
* To register for SAT visit, [www.collegeboard.com](http://www.collegeboard.com)

**TOEFL**

* **T**est **O**f **E**nglish as a **F**oreign **L**anguage.
* An under graduate and graduate exam needed by almost all students who wish to study abroad.
* Designed to measure the English proficiency of non-English speaking people
* Divided into 3 sections, it tests the reading, listening, writing and speaking skills.
* Although the exam is primarily needed by US universities, many universities in UK and Canada recognize the TOEFL.

**GMAT**

* It stands for **Graduate Management Admission Test.**
* Needed for admission to almost all top business schools.
* It consists of English and Math and tests the analytical and logical skills.
* The sections of the exam include verbal and quantitative reasoning, analytical writing and a recently added integrated reasoning sect ion.

**GRE**

* **GRE** stands for **Graduate record Examination.**
* It is needed for admission to most non-business programmes in the US.
* Some institutes in UK (such as London School of Economics) also need the GRE.
* Many business schools around the world have now begun to accept the GRE.
* The section of the exam include xerbal and quantitative reasoning and an analytical writing section. Maximum points for the exam are 340 and most top graduate schools expect candidates to have scores over 320 to be considered for admission (writing section is scored separately for 6). Students can log on to [www.gre.org](http://www.gre.org)

**AP**

* **AP** stands for Advance Placement
* These are the tests that allow a person to get college credit for taking(and passing)the test.
* They are put out by a company called the college Board.
* It is the same company that puts out the **SAT** test.
* A score of 3 or higher is generally considered good and 5 is especially impressive since it is the highest score.
* It comprises university level courses and exams, which can be taken by secondary school students to prepare for university level study in 34 subjects.
* More than 18,000 schools in 115 countries offer the AP courses and exams, where students can take college-level courses while they are still in school.
* They are better prepared for college, especially because they develop critical thinking skills through these courses.
* A student must be under 21 years of age at the time of exam.

**Curricular Practical Training (CPT)** lets you take advantage of working full-time in a professional organization during vacations or for a semester or two during your degree closely supervised by teaching faculty.

**Optional Practical Training (OPT)** allows you to work in US for the duration of 12 months in the area of your specialization after the completion of your degree. Students graduating in science, technology, engineering and math(STEM) may extend OPT up to an additional 17 months.

In addition to CPT and OPT, students on the F1 visa are permitted to work on campus for 20 hours per week.

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