PLACEMENT BOOK
2018-2019

Indian Institute of Technology Jodhpur

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Contact Us

Chairman's Welcome

On behalf of Office of Student Placements, I would like to first thank our prestigious recruiters who have been the major reason for our constant growth. As per our latest placements statistics, we have achieved overall 75% placements. Apart from the placements, the average salary offered had also been increased.

IIT Jodhpur is continuously striving towards excellence and perfection and hence making rigorous efforts towards providing training to its students on technical and professional front. We are focusing towards making our students career oriented rather than job oriented. With the said vision in mind, we are encouraging to create an atmosphere wherein they can plan their career, build competencies in sync with dream careers, provide opportunities to explore their career, through career development activities thereby finding a career oriented job. We will providing the services and resources that assist the students in their ongoing effort of competency mapping, career planning and employer searching. Thus helping the students to have a clear vision about one own's career.

Practical Training is an important aspect along with academics. Apart from placements, we also assist the students on summer training/Internship to work in a professional space, to acquaint themselves with the real world application of technologies they learn on the campus and to enhance their technical skills. This exposure will help them to deliver their best when they join the industry as working professionals.

The Office of Student Placements facilitates interaction between the students and companies so that both can find the best match as per their aspiration and requirements. We try to ensure that full support along with resources and the services required are given to the companies invited during Placement Season in order to run the process efficiently and smoothly.

I would sum up by extending my cordial invitation to you to participate in our Campus Placement Season 2018-19, to identify the best talent you are looking for.

Professor Sandip Murarka
Chairman

1. About our Students
1.1 Our Institute

Indian Institute of Technology Jodhpur was established in 2008, to foster technology, education and research & development in India. The Institute is committed to technology human resource development for India. Scholarship in learning, commitment to research, engagement in creative accomplishments, and relevance to Industry are driving forces for us at IIT Jodhpur.

IIT Jodhpur had successfully moved to its sprawling 852 acre residential Permanent Campus on National Highway 65 (NNE of Jodhpur towards Nagaur). The Permanent Campus is meticulously planned and envisioned to stand as a symbol of academics - simple, but deep.

As on date, the Institute has 848 Students (555 B.Tech., 56 M.Tech., 71 M.Sc. and 166 Ph.D. students) along with 62 Faculty Members (Including 2 Visiting Faculty Members) and 62 Staff Members. The Institute is committed to technology development, and has established state–of–the–art laboratories for basic research. The degree programs are organized through 9 Departments.

IIT Jodhpur is introducing two new departments i.e. Department of Metallurgical and Material Engineering, which will offers courses in M.Tech. and Ph.D. The focus areas of the department will be Electronic, Optical and Magnetic Materials and Devices, Extraction of Metals and Materials Engineering, Integrated Computational Material Engineering, Material Processing, Physical and Mechanical Metallurgy of Materials and Thermodynamics and Kinetics Processes in Materials.

The Department of Bioscience and Bioengineering will host three degree programs namely B.Tech., M.Tech. and Ph.D. program with specialization in biological sciences, medical sciences , technology, and their interfaces. The B.Tech. and Ph.D. programs are slated to start from July 2018, and M.Tech. from July 2017 and hence the students are available for this year placements. The department will offer a wide range of courses from foundation level to advanced level in the said domains for the various degree programs. Hands-on learning will be emphasized using state-of-the-art centralized research facilities.

1.1.1 Vision, Mission & Core Values
Vision

The Institute shall
(1) Promote technology thought and action, and
(2) Prepare needed technical human resources to meet the technology challenges of the nation.

Mission

The Institute shall
(1) Create a vibrant technology Institute that incubates and promotes learning, research, invention and eventually innovation; and
(2) Prepare each primary stakeholder towards maintaining their dharma, while continuing to adhere to its core values:
    (a) Prepare competent Technology Graduates ready to meet Grand Challenges of India;
    (b) Train active functionaries of a process driven professional Institute;
    (c) Facilitate builders of an internationally competitive academic Institute; and
    (d) Provide technology innovation as a force to as many industries as possible for economic value creation.

Core Values

The Institute stands for a set of core values, wherein each member of the IIT Jodhpur community shall
(1) Uphold highest levels of human integrity and dignity;
(2) Not take unfair advantage of any stakeholder of the Institute;
(3) Be ethical, sincere and open in all transactions;
(4) Be continually responsible for upholding utmost confidentiality of all information and circumstances arising out of any interaction;
(5) Work towards building the most admired technology Institute furthering interests of Students, Industries and Society; and
(6) Commit to economic development of India through technological thought and action.

1.2 Student Life

Apart from technical education imparted at the Institute, students are provided the resources and opportunities required to become well-rounded individuals. Students Gymkhana is the self-organized students, which facilitates and governs all student activities. It organizes activities throughout the year towards holistic development of the students. With advisory support from Faculty Members, Students Gymkhana enables them to learn real-life skills, such as teamwork, leadership and management. The Governing Body of the Student Gymkhana comprises of elected student representatives, who run its seven constituents societies – Science and Technology Society, Sports and Game Society, Culture & Literary Society, Campus Life Society, Design & Arts, Students Elected Representatives Society. Clubs and Committees under these 7 societies organize a plethora of activities that cater to the needs of every set of students.

VARCHAS is the annual Sports Fest of IIT Jodhpur. It celebrates the spirit of sportsmanship and serves as a platform to showcase the countless hours of perspiration put in by the teams to achieve higher levels of achievement in their sport. Competitions are held in Basketball, Football, Volleyball, Cricket, Tennis, Squash, Table Tennis, Atheletics, Badminton, Carrom and Chess. These competitions are held at national level stadiums (such as Barkatullah Khan Stadium and Gaushala Maidan), which are testimony to the success of the fest. As a part of Varchas, a Mini-Marathon is organized on a social issue to reach out to the last person and have a positive impact on the society.

IGNUS is IIT Jodhpur's annual Socio-Cultural cum Techno-Entrepreneurial Festival. It is a magnificent feast, where diverse students from all around the country come together to compete in diverse fields including Cultural and Technical events. Realizing its social responsibility, IGNUS organizes a social campaign, PRAKRITI, to ensure sustainable development of the society by conducting various campaigns, competitions and exhibitions in numerous school and colleges. Adding to the glitz of the fest are the pronites featuring some of the biggest artists, like Javed Ali and Vishal Dadlani. Also, adding to the fun are the buzzing informals, a like citywide treasure hunt named *Breakthrough*.

1.3 Facilities
1.3.1 Laboratories

IIT Jodhpur has established good number of teaching and research laboratories and facilities, which aid in elevating the students from minimalist academic concerns to inquisitive world of scientific arena. These teaching and research laboratories help Faculty Members and Students work for better future by supplementing and improving existing technologies and bodies of knowledge, using competence, creativity and imagination. Appearing below is a department-wise list of laboratories established in the Institute.

S.No	Name of the Laboratory
Department of Biology	
1.	Advanced Biosciences and Neuroscience Laboratory
2.	Chemical Biology Laboratory
3.	Environmental Biotechnology Laboratory
4.	Protein Engineering Laboratory
Department of Chemistry	
1.	Chemistry Laboratory
Department of Computer Science and Engineering	
1.	Multimedia Laboratory
2.	Networking Technologies Laboratory
Department of Electrical Engineering	
1.	Control/DSP/Microprocessor
2.	Electronic Circuit Laboratory
3.	Instrumentation & Communication Laboratory
4.	Power Electronics Laboratory
5.	Robotics Laboratory

Department of Humanities & Social Sciences	
1.	Digital Language Laboratory
Department of Mechanical Engineering	
1.	Advance Manufacturing Laboratory
2.	Central Workshop
3.	Dynamics & Vibration Laboratory
4.	Electromechanical Energy Conversion Laboratory
5.	Fluid Mechanics & Heat Transfer Laboratory
6.	High Temperature Solar Thermal Laboratory
7.	Materials Testing & Solid Mechanics Laboratory
8.	Renewable Energy Laboratory
9.	Solar Radiation Laboratory
Department of Physics	
1.	Biomolecular Information Processing Laboratory
2.	Magnetic Property Measurement System (MPMS/SQUID) Laboratory
3.	Material Analysis Laboratory
4.	Physics Laboratory's

1.3.2 Computer Centre

The Institute has a modern Computer Center; presently running on a gigabit LAN with 1GBps internet bandwidth. It is the nucleus of all computing activities for Students, Staff Members and Faculty Members. Several terminal running on the windows and GNU/Linux operating systems across the campus provide access to several licensed software, like MATLAB, Mathematics, Cadence, Mentor Graphic, Ansys, PSCAD and Solidworks.

The Institute has five key resources at the Computer Centre, namely, the Linux Operating System, SVN Server, GIT Server , Owncloud and various licensed application software that are used for academic and research purpose, have made it possible to offer the various resources and facilities

1.3.3 Library

Library supports the teaching and research activities of the Institute by facilitating acquisition, organization and dissemination of knowledge resources, and also by providing library & information services to IIT Jodhpur community. Library is located on the ground floor of Academic Block I in the Academic Campus of IIT Jodhpur, in room nos. 1001, 1001 Extension, and 1011. Library functions with the guidance of Library Committee, which has representatives from all Departments, and Student Representatives.

Library Collection

The Library has a rich and growing collection of 12,000 volumes of books (approx.), which include textbooks, and books of general and reference nature. A wide range of scholarly journals and databases are also subscribed from various sources for the academic and research purposes of the Institute.

Services & Facilities

The following services and facilities are being provided by the Library to its registered users.

(a) Member & Circulation Services
(b) Orientation & User Education
(c) Borrowing Facility
(d) Reference & Information Service
(e) Course Reserves
(f) Current Awareness Service
(g) Inter Library Loan & Document Supply
(h) Digital Library Facility & Services

Digital resources are accessible through the Library website, which is a comprehensive site maintained by Library. They include the Library subscribed resources, online catalogue, lists of useful resources accessible in the open domain like the open access journals, books, repositories, video lectures, open courseware. These resources are continuously updated.

Library also maintains a portal for hosting bibliographic listing of the Faculty Publications. Additionally, a course guide portal has also been developed and maintained by Library, wherein, resources i.e., books available in Library, subscribed journals, resources accessible in open domain are listed and linked, course-wise. This platform is very useful for the students in finding topical and course-wise resources. Library also provides remote access to the subscribed scholarly resources and anti-plagiarism checking.

1.4 Student Career Development Activities

In the current scenario, where India is moving towards developing phase, there is need of intelligent, astute, hardworking, creative and proficient technical abilities. IIT Jodhpur is constantly working towards overall development of the student by assisting the student on career planning and exploring the career opportunities as per their interest which will help them in gaining knowledge, skills, abilities required for their career path. The activities conducted are:

(1) General career counselling by professional agencies/experts are conducted to make students aware with different career prospects and corresponding entry level requirements right from the beginning. This will help students immensely in the careful evaluation of individual strength, and the suitability of a work option.

(2) Assisting individual departments in organizing industry oriented workshops, leadership talks, lectures, competitions, Curriculum Oriented Career Prospect (COCP) workshops including specialized niche areas.

(3) Inviting organizations and experts from various engineering sectors to visit our institute for career interaction with OSP and the students. Such programs will motivate young talents towards core engineering sectors in order to meet the demands of the corporate world, requirement for national progress, and beyond.

(4) Exploring the career by providing the opportunities for internships at both national and international level. One can get greatly benefitted with regard to developing skills, abilities and knowledge and doing career research through internship programs.

(5) Organizing different events conducted by the companies which will give an opportunity to the student to explore their talent and grab the knowledge about the current market trends and be a part of the organization.

(6) Provide Internship opportunities at National and International Level will help the student to explore its abilities and skills in the desired career.

(7) Organizing 4-5 days' workshop on improving the soft skills which is required for overall development of the student and for personal growth. The focus of these programs are Personality Development Skills, Group Discussion, Mock Interviews, Enhancing Body Language, Team work, Leadership, Corporate Etiquette and Resume Writing Skills.

(8) Increasing Alumni Interaction who act as a Mentor for the students in designing their career path.

This helps students to focus, set goals, introspect, find solutions to their lacunae, inculcate confidence and prepare themselves not only for the placement season but also for life ahead…

1.5 Student Achievements

Every year, the students contribute to the glory of the Institute by showcase their talent in various events:

(1) Ph.D. student received Best Poster Prize from American Chemical Society.

(2) B.Tech. student had received the fully funded MS Program at Simon Fraser University, Canada.

(3) Ph.D. student from the Department of Electrical Engineering represented India at 19th World Festival of Youth and Students at Sochi, Russia.

(4) Ph.D. student from the Department of Physics, received the third best poster award for his research work on "Analysis of Quantum Satellite Communication under Atmospheric Effects" at the 2017 Siegman International School on Lasers during 6-11 August 2017 at Lion, Mexico City.

(5) Three B.Tech. Students from the Batch 2012, have secured AIR 7, AIR 22 and AIR 24 rank.

(6) Three B.Tech. Student from the Department of Electrical Engineering were commended successfully for completing a mini project on Automated Fruit Harvesting Robotic Arm as part of their engagement as part of Industry Immersion Program (IIP) at Mahindra Research Valley in Chennai.

(7) Ph.D. student and also a Saravanan Rajamani, Research Assistant, Department of Electrical Engineering have been selected to receive the SERB National Post - Doctoral

(8) Fellowship 2017, offered by the Science and Engineering Research Government of India.

(9) Team VAAYU 2.0 of Automobile Club at IIT Jodhpur participated in BAJA 2016 – an all-terrain vehicle design competition organized by Society of Automobile Engineers (SAE) India. In the *Virtual Round* held at Chitkara University, Patiala, and Punjab day 10-11 July 2015, VAAYU 2.0 qualified for the final event with scoring of 92.64/100 in presentation component, which is 13th out of 152 teams who qualified amongst about 400 teams that participated in the event. After qualifying in Virtual Round, the team is gearing up for developing an all-terrain vehicle to participate in the final round of competition.

(10) Photographic talents of the students were showcased at "Spark from India: A photographic journey through incredible India" at the Galerrie Lorien in Copenhagen, Denmark during 17 October – 14 November 2015 along with the work of other professionals artists from around the world.

(11) Six students receive the Internship Award from *Panasonic Corporation* on 19 July 2015.

(12) Seven students received DAAD WISE Scholarship and 1 S.N. Bose Scholarship all for a period of 3 months (May – July 2016).

(13) Robotics Club students participated in IIT Bombay Tech Fest *Magneto* event and secured 4th position.

1.6 Degree Programs at the Institute

1.6.1 Bachelor of Technology
(a) B.Tech. (Computer Science & Engineering)

B. Tech. (Computer Science & Engineering) Program focuses on imparting in students fundamental knowledge of theoretical concepts as well practical facets of Computer Science & Engineering in students, and thereby preparing them to embark on meeting technology challenges through research and development. There is a strong emphasis in the curriculum on *hands-on experience* through laboratory courses and projects. The courses are designed so as to train the students in the latest computer science technology and skill set, which is being currently used and is in high demand in the industry.The Department boats of Faculty Members with expertise in diverse yet cutting edge areas of computer science, such as Machine Learning, Pattern Recognition, Computer Vision, Computational Complexity, Distributed Systems, Cloud Computing, Wireless and Sensor Networks, Internet of Things, Computer Security, Software Defined Networks, and Computational Geometry. As a result, students get ample exposure in working with the latest tools and frameworks from all these different areas during B. Tech projects. The Faculty Members of the Department are engaged in research projects that intend to advance the state-of-the-art in core computer science topic from computer vision, pattern recognition, wireless networking, cloud computing, and computational complexity, as well as in interdisciplinary projects in the fields of Medicine, Robotics, and Building Energy. The Faculty endeavors to incorporate real world lessons and updated knowledge learnt from these projects in the course content and laboratory projects.

Compulsory Courses

Semester 1	Semester 2
ME111 System Exploration – Drawing CS111 Computer Programming PH111 Electromagnetism & Optics MA111 Linear Algebra & Calculus CS112 Discrete Mathematics HS111 English PE111 Physical Exercise I	ME121 System Exploration – Workshop EE121 Basic Electronics Engineering ME122 Engineering Mechanics MA121 Complex Analysis & Differential Equation CS121 Data Structures & Algorithms HS121 Rights, Responsibilities, Law & Constitution PE121 Physical Exercise II
Semester 3	**Semester 4**
EE211 Basic Electrical Engineering CS211 Digital Logic & Design CY211 Chemistry CS212 Object Oriented Analysis & Design EE213 Signals and Systems HS211 Principles of Economics	MA221 Probability Statistics and Random Processes CS221 Computer Organization & Architecture CS222 Theory of Computation CS222 Software Engineering CS223 B.Tech. Project 1 HS221 Introduction to Management
Semester 5	**Semester 6**
CS311 Data Communication CS312 Compiler Design CS313 Operating Systems CS314 Algorithm Design & Analysis CS398 B.Tech. Project 2 HS311 Principles of Psychology	CS321 Computer Networks CS322 Database Systems CS323 Artificial Intelligence Elective 1 CS399 B.Tech. Project 3 Culture, Art and Heritage
Semester 7	**Semester 8**
Elective 2 Elective 3 Elective 4 CS498 B.Tech. Project4 HS411 Basics of Leadership	Elective 5 Elective 6 Elective 7 CS499 B.Tech. Project 5 Role of Technology in the Development of India

Electives

CS651 Advanced Computer Networks CS652 Pattern Recognition CS660 Select Topics in Algorithms CS661 Select Topics in Networking and Communication CS654 Digital Image Analysis CS5551 Beyond NP Completeness	CS655 Computational Complexity Theory CS 656 Machine Learning CS553 Computational Geometry CS552 Computer Graphics CS554 Principal of Data & System Security CS662 Neural Networks and Deep Learning

(b) B.Tech. (Electrical Engineering)

The B.Tech. (Electrical Engineering) Program is designed to prepare students to pursue careers not only in Industry, but also in Academia and R&D organizations. Students are instilled with a keen sense of inquisitiveness, which motivates them for continued professional betterment and improvement. The Department of Electrical Engineering has a number of laboratories required, which enable students to have practical hands-on-experience as a part of curriculum. Many of these laboratories facilities are of state-of-the-art level, in the fields of instrumentation, electrical machines, microelectronics, signal processing, power electronics, control systems and power systems. In addition to the engagement at the Institute, students gain experience of working on real-life problems through summer internships in the industry.

Compulsory Courses

Semester 1	Semester 2
ME111 System Exploration – Drawing CS111 Computer Programming MA111 Electromagnetism and Optics PH111 Linear Algebra & Calculus EE111 Physics of Semiconductor Devices HS111 English /Foreign Language PE111 Physical Exercise I	ME121 System Exploration – Workshop EE121 Basic Electronics Engineering ME122 Engineering Mechanics MA121 Complex Analysis & Differential Equation EE122 Electromagnetic Theory HS121 Rights, Responsibilities, Law & Constitution PE121 Physical Exercise II
Semester 3	**Semester 4**
EE221 Basic Electrical Engineering CY211 Chemistry EE211 Thermodynamics EE213 Circuit Theory HS211 Signals and Systems Economics	EE221 Electrical Machines MA221 Probability Statistics & Random Processes EE222 Digital Logic & Design EE223Power System EE298 B.Tech. Project 1 HS221 Management
Semester 5	**Semester 6**
EE311 Power Electronics EE312 Microprocessors & Microcontrollers EE313 Communication Systems EE314 Analog Electronics EE398 B.Tech. Project 2 HS311 Psychology	EE321 Contemporary Communication System EE322Digital Signal Processing EE323Microwave Engineering EE324Control Systems EE399B.Tech. Project 3 HS221 Writing in Newspaper Column
Semester 7	**Semester 8**
Elective 1 Elective 2 Elective 3 CS498 B.Tech. Project 4 HS411 Introduction to Leadership	Elective 4 Elective 5 Elective 6 CS499 B.Tech. Project 5 HS421 Development of India

Electives

Semester 7	Semester 8
Electronic System Design Digital Signal Processing and Applications Digital IC Design Sensors in Instrumentation Wireless Communications	Embedded Systems Design VLSI Design Techniques Adaptive Signal Processing Mobile Communication Systems IC Technology

(c) B.Tech. (Mechanical Engineering)

The B. Tech (Mechanical Engineering) curriculum integrates fundamentals of science and engineering along with modern industrial practices. The Program offers broad exposure to a number of facets of Mechanical Engineering, including Engineering Mechanism, Thermodynamics, Fluid Mechanics, Dynamics, IC engines, Combustion, Vibration Design, Manufacturing Processes, Product & Process Modelling and Simulation, Mechatronics, and Mechanics of Materials and Composites. With modern laboratory and research facilities, IIT Jodhpur encourages its Mechanical Engineering students not only to solve industry-oriented problems, but also to design and innovate. The Mechanical Engineering graduates of IITJ are open to be employed in every facet of the Industry.

Compulsory Courses

Semester 1	Semester 2
ME111 System Exploration – Drawing CS111 Computer Programming MA111 Linear Algebra & Calculus CY211 Chemistry ME112 Engineering Materials HS111 English Language PE111 Physical Exercise I	ME121 System Exploration – Workshop EE121 Basic Electronics Engineering ME122 Engineering Mechanics MA121 Complex Analysis & Differential Equation ME121 Fluid Mechanics HS121 Rights, Responsibilities, Law & Constitution PE121 Physical Exercise II
Semester 3	Semester 4
EE221 Basic Electrical Engineering PH111 Electromagnetism and Optics ME211 Thermodynamics ME213 Mechatronics ME214 Mechanics of Solid HS211 Economics	ME221 Casting, Welding and Forming MA221 Probability Statistics & Random Processes ME222 Kinematics of Mechanism & Machines ME223 Heat and Mass Transfer ME298 B.Tech. Project 1 HS221 Management
Semester 5	Semester 6
ME311 Dynamics of Machines & Mechanism ME312 IC Engines ME313 Machining Science & Metrology ME315 Production and Operations Management ME398 B.Tech. Project 2 HS311 Psychology	ME321 Refrigeration & Air Conditioning ME322 Turbo Machinery ME323 Design of Machine Elements ME324 Industrial Engineering ME399 B.Tech. Project 3 HS411 Art, Culture and Heritage
Semester 7	Semester 8
Elective 1 Elective 2 Elective 3 CS498 B.Tech. Project 4 HS411 Introduction to Leadership	Elective 4 Elective 5 Elective 6 CS499 B.Tech. Project 5 HS421 Role of Technology in Development of India

Electives

ME653 Solar Thermal Design
ME654 Solar Refrigeration and Air Conditioning
ME665 Continuum Mechanics
ME655 Numerical Analysis of Heat and Fluid flow
ME656 Lean Manufacturing
ME658 Dynamics of Vibration
ME657 Manufacturing of Plastics, Ceramics and
       Composites
	ME659 Structural Mechanics
	ME651 Water Energy Nexus
	ME660 Finite Element Analysis
	ME663 Design of Agricultural Implements
	ME670 Vehicle Dynamics
	ME671 Robotics
	ME617 Computer Aided Manufacturing
	ME672 Geometric Modeling and Computer Aided
	       Design

1.6.2 Master of Science Programs
(a) M.Sc. (Physics)

The M.Sc. Program in Physics is aimed to motivate and train the young science graduates to pursue careers in R&D in frontier areas of Physics. This program aims to provide the student with rigorous training to prepare him/her for a strong career in academics and research. The Program is planned to build in students a strong foundation of knowledge, and encourage creativity in thinking.

The domains for thesis work include the following:
(1) Fundamental interactions of nature with the frontiers of quantum information and sub-atomic physics, which has the potential to lead to the development of relativistic quantum technologies;
(2) Light-matter interactions to understand the nature of states with a potential use towards quantum communication, such as quantum cryptography.
(3) Material research in solar thermal and photovoltaic devices.
(4) RF Energy Harvesting and Nano - Materials for sensor and actuator applications.

Compulsory Courses

Semester 1	Semester 2
PH511 Mathematical Physics PH512 Classical Mechanics PH513 Quantum Mechanics PH514 Electronics PH515 Statistical Physics	PH521 Atomic & Nuclear Physics PH522 Condensed Matter Physics PH523 Electrodynamics PH524 Advanced Quantum Mechanics Elective I
Semester 3	**Semester 4**
Elective Thesis	Elective Thesis

Electives

PH761 Astrophysics
PH762 Quantum Field Theory
PH755 Particle Physics
PH756 General Theory of Relativity
PH754 Magnetism & Superconductivity
PH759 Understanding Scanning Tunneling
    Microscope
PH760 Materials and Device Characterization
PH762 Quantum Information Processing
	PH758 Semiconductor Device Technology
	PH764 Electronic Transport in Mesoscopic
	    Systems
	PH765 Vaccum Systems & Thin Film
	    Technology
	PH763 Quantum Coding and Cryptography
	PH766 Relativistic Quantum Mechanics
	PH767 Classical & Quantum Optics
	    Computational Physics

(b) M.Sc. (Chemistry)

The two-year M.Sc. (Chemistry) Program offers education in the fundamental areas of chemical science and experimentation towards technology development. With one year rigorous thesis work, program allows sufficient time to involve students in research and prepare them for a career in computational, experimental inorganic and organic chemistry and materials chemistry. The curriculum is designed to provide an education based on science both for students planning to pursue advanced research, and for those aiming to immediately pursue professional careers in industries or allied field, for which fundamental knowledge of Chemistry is imperative.

Compulsory Courses

Semester 1	Semester 2
CY511 Reaction and Mechanisms CY512 Transition Metal Chemistry CY513 Statistical Thermodynamics & Chemical Kinetics CY514 Quantum Chemistry & Spectroscopy CY515 Mathematical & Numerical Techniques for Chemists	CY521 Physical Organic Chemistry CY522 Main Group Chemistry CY523 Solid State & Material Chemistry CY524 Chemical Binding CY525 Organometallic & Bio – Inorganic Chemistry
Semester 3	**Semester 4**
Elective Thesis	Elective Thesis

Electives

CY751 Quantum Computing CY752 Principles of Nuclear Magnetic Resonance CY753 Analytical Techniques & Spectroscopy CY754 Statistical Mechanics & Molecular Simulations CY755 Advanced Catalysis CY756 Group Theory & Molecular Spectroscopy CY757 Chemical Binding CY758 Stochastic Problems in Biophysics	CY759 Advanced Material Design CY760 Polymer Dynamics CY761 Art in Organic Synthesis CY762 Quantum Chemistry CY763 Catalysis for Energy CY764 Chemical Reaction Dynamics CY765 Molecular Dynamics Simulations CY768 Water Chemistry CY769 Sustainable Catalytic Design

(c) M.Sc. (Mathematics)

While the classical mathematics provides foundations for analysis of key principles behind modern and emergent technologies, modern mathematics coupled with computational capabilities is opening new avenues for further explorations. M.Sc. (Mathematics) Program at IIT Jodhpur aims at tapping these opportunities by developing workforce specialized in mathematics needed for developing key technologies. The Program strives to balance between analysis and application of Mathematics. In this four semester program, the first two semesters have course work, and the last two semester's thesis work, along with recommended research Summer Internship in some good Institute or company.

The student can explore further in her/his area of interest with elective courses. As a part of two semester long thesis work, Students of this Program undertake research in mathematics needed for aspects of key technologies and emerging areas. This will give them an opportunity to apply their mathematical skills to solve real-life problems. The program aims at enhancing, such real-life-problem-solving skills by collaborating with Industry and R&D organisations.

Compulsory Courses

Semester 1	Semester 2
MA511 Linear Algebra MA512 Real Analysis MA513 Ordinary Differential Equation MA514 Probability and Statistics MA515 Programming Techniques	MA521 Abstract Algebra MA522 Complex Analysis MA523 Partial Differential Equations MA524 Numerical Analysis MA525 Functional Analysis
Semester 3	**Semester 4**
Elective Thesis	Elective Thesis

Electives

ML551 Topology ML552 Wavelets analysis and Applications BL755 Complex Networks ML553 Dynamical Systems ML524 Optimization	

1.6.3 Master of Technology Program
(a) M.Tech. (Electrical Engineering)

Electronic systems are integral part of almost all systems today, starting from computers, laptops, cell phones, and other handheld devices, to various high cost equipment's used in research, development, and production. Currently, many of these high-end systems and equipments are being procured from outside country. To be able to build these systems in the country, learning to design these systems is crucial. Designing the associated electronic systems requires thorough understanding of various areas, such as Communications and Signal Processing, VLSI Design and Technology, Embedded Systems and Instrumentation. Electronic Systems Design and Manufacturing has been identified as an important thrust area of the nation for development and self-sustainability. Hence, there is a need for creating skilled human resource in this area.

This 2-year M. Tech. (Electrical Engineering) Program with specialization in Electronic Systems is designed to provide students enough skills for designing electronic products used in day-to-day life, as well as for high-end products for real-world applications. This Program is intended to educate engineers to conceive electronic systems specifications, design such systems, implement, and verify them using design tools and technologies. It provides in-depth coverage of the methodologies critical to understanding and designing systems, including hardware and software components, to achieve desired functionalities. System functionality must be implemented within challenging constraints, such as real-time requirements, performance, reliability, and power consumption. To meet all the requirements, Students must not only understand the technology of hardware components (such as microprocessors), but also master the design of application-specific electronic systems.

Compulsory Courses

Semester 1	Semester 2
EE616 Electronic System Design EE617 Digital Signal Processing & Applications EE618 Digital IC Design EE619 Sensors in Instrumentation Elective 1	EE623 Embedded Systems Design EE624 Design Techniques Elective 2 Elective 3 Elective 4
Semester 3	**Semester 4**
EE698 Thesis	699 Thesis

Electives

Semester 1	Semester 2
EE651 Wireless Communication EE657 DSP System Design and Implementation EE658 Microelectronics Simulations EE659 Biomedical Instrumentation	EE666 Adaptive Signal Processing EE661 Mobile Communication Systems EE662 IC Technology EE663 System Hardware Design EE664 Testing & Verification EE665 CMOS Analog VLSI Design

(b) M.Tech. (Mechanical Engineering)

The M. Tech (Mechanical Engineering) Program was started at IITJ during July 2015. Students with B. Tech. (Mechanical Engineering) degree and valid GATE score in Mechanical Engineering are eligible for admission to the program. The course work of the program covers broader aspects of Mechanical Engineering discipline and a student can select electives and thesis work in any one of the following specialized areas namely, Thermal Sciences, Manufacturing and Solid Mechanics and Design. The total requirement for graduation is 64 credits out of which 30 credits are to be earned through course work and the remaining through thesis work spread over two semesters. Some of the recent major thrust research areas of the department include: Solar Energy, Robotics, Rotor Dynamics, Computational Fluid Dynamics, Welding, Computer Integrated Manufacturing etc.. The Department has active collaborations with a number of Industries in terms of student exchange and R&D. Some of these industries include: Indian Oil, ONGC, Tata Motors Limited, Tata Steel, L&T Limited, Mahindra & Mahindra Limited and TVS Motor Company Limited. M. Tech students get exposure to CAE software, such as ANSYS, SOLIDWORKS, PR0-E and MATLAB, as well as to state-of-the-art research laboratories in Manufacturing Science, Solid Mechanics, and Thermal Sciences.

Compulsory Courses

Semester 1	Semester 2
ME616 Mechanical Metallurgy ME617 Thermal Energy Conversion ME618 Numerical Methods in Mechanics ME619 Multi-body Dynamics Elective 1	ME623 Experimental Techniques ME624 Engineering Optimization ME625 Computer-Aided Manufacturing Elective 2 Elective 3
Semester 3	**Semester 4**
ME698 Thesis	ME699 Thesis

Electives

ME653 Solar Thermal Design ME654 Solar Refrigeration & Air Conditioning ME655 Continuum Mechanics ME656 Numerical Analysis of Heat & Fluid Flow ME657 Lean Manufacturing ME658 Dynamics of Vibration ME659 Manufacturing of Plastics, Ceramics and Composites ME660 Structural Mechanics ME661 Water Energy Nexus ME662 Finite Element Analysis ME663 Design of Agricultural Implements ME670 Vehicle Dynamics ME671 Robotics	ME672 Geometric Modeling and Computer Aided Design ME751 Advanced Fluid Mechanics ME752 Theory of Arc Welding Processes ME753 Vibration in Medical Implements ME754 Failure Analysis ME755 Computer Aided Manufacturing ME756 Boundary Layer Theory ME757 Metallurgy of Joining Processes ME758 Vibration in Agricultural Implements ME759 Rotor Dynamics ME760 Quality Control of Weldments ME761 Renewable Energy Sources

1.6.4 Doctor of Philosophy Program
(a) Ph.D. (Bioscience and Bioengineering)

The Department of Bioscience and Bioengineering aspires to cater to the technological requirements of the Country by conducting high-quality, translatable research and by training our students to be technological innovators in Biological Sciences. Our research is focused on developing solutions in the areas of developing solutions in the area of healthcare, the environment and agriculture. Our Faculty Members pursue complex biological question in the field of Molecular and Cellular Biology, Systems & Computational Biology, Biomaterials & Biomechanics and Biological Processes & Bio – Devices.

The Department currently offers M.Tech. and Ph.D. programs in Bioscience & Bioengineering. The Department actively collaborates with other Departments of the Institute and with other Institutions of higher learning in and around Jodhpur to maximize research and teaching outcomes.

Semester 1	Semester 2
Electives	Electives
Semester 3	**Semester 4**
BL799 Ph.D. Thesis	BL799 Ph.D. Thesis
Semester 5	**Semester 6**
BL799 Ph.D. Thesis	BL799 Ph.D. Thesis
Semester 7	**Semester 8**
BL799 Ph.D. Thesis	BL799 Ph.D. Thesis

Electives

BL751 Physiology and Neuroscience BL752 Computational and Systems Biology HS751 Consciousness PH752 Biomolecular Information Processing CY752 Principles of Nuclear Magnetic Resonance	HS752 Cognitive Science PH753 Biomolecular Information Processing BL755 Complex Networks BL756 Biomacromolecules and Bioengineering HS753 Bioengineering Ethics CY753 Analytical Techniques and Spectroscopy CY754 Statistical Mechanics and Molecular Simulations BL757 Cellular and Molecular Neuroscience

b) Ph.D. in Chemistry

The Department of Chemistry at IIT Jodhpur is striving to be acknowledged for excellence in teaching, research and outreach, at a distinctive locus of science and technology. It has started its journey of making technology contributions in new materials for energy solutions, catalysis and water. Alongside, focus is on fundamental understanding of Chemical Dynamics, Biological Phenomena, Nuclear Magnetic Resonance, Organic Synthesis, Organometallics, Quantum Chemistry and Quantum Information.

Semester 1	Semester 2
Electives	Electives
Semester 3	**Semester 4**
CY799 Ph.D. Thesis	CY799 Ph.D. Thesis
Semester 5	**Semester 6**
CY799 Ph.D. Thesis	CY799 Ph.D. Thesis
Semester 7	**Semester 8**
CY799 Ph.D. Thesis	CY799 Ph.D. Thesis

Electives

CY752 Principles of Nuclear Magnetic Resonance CY755 Advance Catalysis Spectroscopy CY756 Group Theory and Molecular CY757 Chemical Binding CY758 Stochastic Problem in BioPhysics CY759 Advance Material Design CY766 Polymer Dynamics	CY753 Analytical Techniques & Spectroscopy CY 761 Art in Organic Synthesis CY762 Quantum Chemistry CY763 Catalysis for Energy CY764 Chemical Reaction Dynamics CY765 Molecular Dynamics Simulations CY766 Stereochemistry of Organic Compounds CY767 Water Chemistry

c) Ph.D. in Humanities and Social Sciences

The Department of Humanities and Social Sciences operates from spaces that give us an opportunity to act as an interface between empirical and experiential knowledge systems. Playing a significant role in the academic curriculum of the young engineers, we offer both core and elective courses at the Bachelors, Masters, and Doctoral levels. The ability to provide tools and skills for specific aims notwithstanding, the essence of Humanities and Social Sciences involves the sensitizing of individuals.

The Department has a vibrant research community and offers specializations in diverse disciplines including but not limited to Clinical and Positive Psychology, Applied Ethics, Bioethics, Intellectual Property Rights, Health Economics, Health Policy, Philosophy of Science, Aesthetics, Cognitive Studies, Literature and Environment and Environmental Humanities. The students specialize in areas ranging from Eocrticism, Philosophy of Education, Contemplative Studies, Reproductive Healthcare, Child Healthcare, Diaspora, Migration, Transnational Migration, Philosophy of Mind and Cognition, Cognitive Archaeology, Tourism, Consumer Behaviour and Signal Processing to name a few.

With students from a spectrum of backgrounds, the Department provides an enriching platform-where technical education can be complemented with human and social understanding. This task assumes even more significance in an educational context where the brightest young minds of India come together.

Semester 1	Semester 2
Electives	Electives
Semester 3	**Semester 4**
HS799 Ph.D. Thesis	HS799 Ph.D. Thesis
Semester 5	**Semester 6**
HS799 Ph.D. Thesis	HS799 Ph.D. Thesis
Semester 7	**Semester 8**
HS799 Ph.D. Thesis	HS799 Ph.D. Thesis

Electives

HS751 Qualitative and Quantitative Methodology HS755 Philosophy of Mind HS756 Nature Writings in American Literature HS654 Sociocultural Theories	HS752 Cognitive Science HS753 Bioengineering Ethics HS757 Twentieth Century Analytic Philosophy HS758 Literature and Environment HS759 Language and Cognition

d) Ph.D. in Mathematics

The classical mathematics ensures the basis for the analysis of central principles underlying modern and emergent technologies, contemporary mathematics associated with modern computational facilities are introducing novel avenues for exploration. Ph.D. Program at IIT Jodhpur is offered with the objective of tapping these opportunities by evolving both motivated researchers in the frontline areas and well trained workforce in the form of teaching faculty. The Program strives to provide a vibrant environment to nurture the knowledge and interpersonal skills of the students in pursuit of developing well-trained workforce.

In this program, the first two semesters have course works, and consequent semesters are dedicated to the thesis work, along with recommended research internships and collaboration in reputed Institute or industry for a greater learning experience. As a part of thesis work, Students of this Program undertake research in mathematics needed for aspects of key technologies and emerging areas. This will give them an opportunity to apply their mathematical skills to solve real-life problems. The program aims at enhancing, such real-life-problem-solving skills by collaborating with Industry and R&D organizations.

Semester 1	Semester 2
Electives	Electives
Semester 3	**Semester 4**
MA799Ph.D. Thesis	MA799 Ph.D. Thesis
Semester 5	**Semester 6**
MA799 Ph.D. Thesis	MA799 Ph.D. Thesis
Semester 7	**Semester 8**
MA799 Ph.D. Thesis	MA799 Ph.D. Thesis

Electives

MA754 Algorithmic Graph Theory MA755 Chaos Theory and its Applications MA756 Functional Analysis	MA757 Numerical Partial Differential Equations MA759 Stochastic Process

e) Ph.D. in Physics

A visible research in fundamental Physics along with its applications is the major theme of Physics Department at IIT Jodhpur. The Faculty members carry out research in the field of Astrophysics, Condensed Matter Physics & Material Science, Particle Physics, Experimental and Theoretical Quantum Optics, Quantum Information and Foundations of Quantum Mechanics. The research facilities available in the department include SQUID magnetometer, Physics Property Measurement Systems (PPMS), Raman Spectrometer and Scanning Tunnelling Microscope (STM).

Semester 1	Semester 2
Electives	Electives
Semester 3	**Semester 4**
PH799 Ph.D. Thesis	PH799 Ph.D. Thesis
Semester 5	**Semester 6**
PH799 Ph.D. Thesis	PH799 Ph.D. Thesis
Semester 7	**Semester 8**
PH799 Ph.D. Thesis	PH799 Ph.D. Thesis

Electives

PH754 Magnetism and Superconductivity PH755 Particle Physics PH756 General Theory of Relativity PH757 Quantum Field Theory PH758 Semiconductor Device Technology PH759 Understanding Scanning Tunneling Microscope	PH760 Material and Device Characterization PH761 Astrophysics PH762 Quantum Computation and Information PH763 Quantum Coding and Cyptography PH764 Electronic Transport in Mesoscopic System PH765 Vaccum Systems and Thin film Technology

f) Ph.D. in Computer Science

The department has research interests in core areas of Computer Science and engineering. The Doctor of Philosophy (Ph.D.) program is offered with the goal of producing state-of-the art research outputs. Ph.D. students are working in the areas of video analytics, image understanding, cloud computing, document analysis, and internet of things. To strengthen the core competence, department is also looking for faculty members in all areas of Computer Science and Engineering. Prospective candidates are encouraged to visit our recruitment page to know more about the procedure.

Department is also keen on collaboration with industry and academia. At present, projects are going on with All India Institute of Medical Science (AIIMS), Jodhpur, Department of Science and Technology, Govt. of India.

Semester 1	Semester 2
Electives	Electives
Semester 3	**Semester 4**
CS799 Ph.D. Thesis	CS799 Ph.D. Thesis
Semester 5	**Semester 6**
CS799 Ph.D. Thesis	CS799 Ph.D. Thesis
Semester 7	**Semester 8**
CS799 Ph.D. Thesis	CS799 Ph.D. Thesis

Electives

CS651 Advanced Computer Networks CS652 Pattern Recognition CS654 Digital Image Analysis CS664 Principles of Data & System Security CS552 Computer Graphics CS611 Foundation of Computer Science CS612 Machine Learning	CS662 Neural Networks & Deep Learning CS655 Computational Complexity CS553 Computational Geometry CS551 Beyond NP- Completeness CS659 Computer Vision CS621 Advanced Data Structures & Algorithms CS622 Advanced Operating Systems

f) Ph.D. in Electrical Engineering

The Department of Electrical Engineering, formerly a part of the Centre for Information and Communication Technology (ICT) at IIT Jodhpur (2008), primarily focuses on imparting quality education and preparing students to face the future technological challenges. The vision of the Department is to enhance the research environment and to innovate in pedagogy to address the challenges of socio-economic and human resource development. The Department is committed to engage in high quality research by Faculty Members and Students, and in the pursuit of excellence in teaching.

The broader area of Research are: Microelectronics, Power & Control Systems, Communication and Signal Processing, RF & Microwave.

Semester 1	Semester 2
Electives	Electives
Semester 3	**Semester 4**
EE799 Ph.D. Thesis	EE799 Ph.D. Thesis
Semester 5	**Semester 6**
EE799 Ph.D. Thesis	EE799 Ph.D. Thesis
Semester 7	**Semester 8**
EE799 Ph.D. Thesis	EE799 Ph.D. Thesis

Electives

EE751 Bandgap Engineering EE752 Multiuser MIMO Communications EE753 Robust Control	

h) Ph.D. in Mechanical Engineering

The desire to contribute to national and global causes such as the solar mission and climate change is at the heart of the academic activities carried out within the Department of Mechanical Engineering IIT Jodhpur. Several application domains of interest in Mechanical Engineering (such as solar energy, automotive technologies and health) motivate Students, Staff Members and Faculty Members.

During the last six years, several collaborative projects have been initiated with a number of industries and research laboratories across India (such as Thermax, Sunborne, Areva, STEAG, BHEL, IOCL, ONGC, BARC, and NFTDC) to pursue research and development in the area of mechanical engineering. To fructify these interactions, a vibrant Masters Program in Mechanical Engineering is being launched in July 2015. To respond to the diverse needs of students, broad based Bachelors and Masters Programs in Mechanical Engineering are being designed, with scope to let students specialize in interdisciplinary as well as sub-domains of Mechanical Engineering. A Doctoral Program is underway in the Department. Currently, about 10 Ph.D. students are pursuing research in thermal, design and manufacturing streams of Mechanical Engineering. The main objective of the academic programs is to build capacity and capability necessary to make the nation competitive in the globalized world. Also, the students are being made aware of professional skills, such as seeking patentable innovations, taking up technology transfer tasks and active collaboration with industrial partners.

Semester 1	Semester 2
Electives	Electives
Semester 3	**Semester 4**
EN799/ME799Ph.D. Thesis	EN799/ME799Ph.D. Thesis
Semester 5	**Semester 6**
EN799/ME799Ph.D. Thesis	EN799/ME799Ph.D. Thesis
Semester 7	**Semester 8**
EN799/ME799Ph.D. Thesis	EN799/ME799Ph.D. Thesis

Electives

ME751 Advanced Fluid Mechanics ME752 Theory of Arc Welding Processes ME753 Vibration in Mechanical Systems ME754 Failure Analysis ME755 Soil and Water Conservation Engineering	ME756 Boundary Layer Theory ME757 Metallurgy of Joining Process ME758 Vibration in Agricultural Implements ME759 Rotor Dynamics ME760 Quality Control of Weldments ME761 Renewal Energy Sources PH751 Nuclear Physics

2. Facilitation to Companies by the Institute

2.1 What we offer you this year

During 2015-16, a major step taken forward by the Institute was the launching of the *Industry Immersion Program*. In the inaugural edition, 30 Students and 5 Faculty Members spent the summer in the leading technology industries of the country – Mahindra & Mahindra Limited, Larsen & Toubro Limited, Tata Motors Limited, TVS Motor Company Limited, and Tata Power Company Limited, as the first of the 3-summer immersion of this set of Students and Faculty Members. Last year, the set of the students who underwent the said program also received the PPO's based upon their performance in the companies. The curriculum provides the opportunities to students to get exposure to real time problems and associate with the companies for all the 3 years.

Extensive on-field experienced students through a variety of Institute level projects and internships in collaboration with renowned companies. The students are exposed to a corporate environment through various activities, seminars, sessions and program gives them the opportunity to solve the real time problems in the industry.

Other Facilities available

The Institute will facilitate with the following:
(1) Local transportation arrangement by the Institute for the visiting guests.
(2) Halls with well-equipped audio multimedia computers and LCD Projection, facilities and have a sitting capacity of more than 100 for pre-placement presentations.
(3) Halls for conducting written tests and rooms for conducting interviews.
(4) Computer Services Center to conduct online examination.
(5) Rooms for conducting Group Discussions.
(6) Accommodation in the Institute Guest House with Boarding & Lodging facilities on demand. Accommodation can be arranged in nearby hotels.
(7) Student Representatives shall be assigned to the respective Company for your assistance.
(8) Internet, Phone, Printing Facilities for the visiting team.

2.2 Placement Activities

The Placement season begins from 1st October and goes up till May of the following year. The Office of student placement send invitation to the companies and provide them with full assistance and support for conducting the placement process in efficient and orderly manner. A brief description of the placement activities is explained below:

(1) Pre – Placement Offers
(2) Student Registration for Placement
      (a) Verification of Documents
      (b) Finalization of Students Eligible for Placement Process
      (c) Career Development Activities for Final Placement
(3) Companies Registration for Placement
      (a) Inviting Companies
      (b) Finalization of Dates
      (c) Announcement of Dates
      (d) Logistics Arrangement
(4) Visit of Companies to Campus
(5) The Placement Process
      (a) Pre-Placement Talk
      (b) Online or Written Tests
      (c) Group Discussions
      (d) Interviews
      (e) Declaration of Results
      (f) Feedback to Institute
(6) Post Placement Process
      (a) Data Updation
      (b) Data Analysis

2.2.1 Pre-Placement Offers

This event takes place after the successful completion of summer internship process. The internship tenure offers an ideal opportunity for a Company to evaluate the caliber and suitability of the Student for placement. If the Company wishes to employ the Student who does internship in the respective company, it may offer *Pre-Placement Offer (PPO)* of the employment to the Student after the completion of the course. The student is liable to inform the OSP about PPO and her/his interest on acceptance. Once the student accept the placement process, he/ she shall be out of the placement procedure.

2.2.2 Student Registration for Placements

Students who are likely to graduate and are interested in seeking placement through Office of Student Placement of the Institute are required to register at the OSP, expressing their acceptance of the norms of the Office of Student Placements. A student once registered has to go through the entire process and non-compliance of the same will lead to stern action.

(a) Verification of the Documents

The next stage of registration is verification of documents. Students registered are required to get their documents verified at Office of Student Placement (OSP). The information mentioned in the resumes should be supported by original documents. Students are expected to give the correct information. If any, information is found to have been forged, disciplinary action will be initiated against the student.

(b) Finalization of Students Eligible for Placement Process

The students can participate in the placement process of a company subject to the following conditions:
(1) The OSP confirms his verification process.
(2) He meets the eligibility criteria of the Company
(3) He accepts the Placement Norms

Any kind of misconduct which hampers the relationship with the company will make him not eligible. After verifying the documents, a complete list of the students are prepared and uploaded on the portal along with their verified Resume and CGPI details.

(c) Career Development Activities

The Office of Student Placements is also focused on developing the career of the students through Career Development activities i.e. by creating awareness about making career plans, providing opportunities to explore the career of the students in the area of their interest and competence developing with sync with the abilities or skills required and making further plans to achieve the career goal. Professional Training Institute are also hired for conducting the Training sessions on "Improving the Employability Skills" of Final year students for placements. The training module is designed to focus on areas such as Resume Building, Group Discussion, Placement Etiquettes and Interview Skills. All the students registering for placements are required to attend the said training module.

2.2.3 Company Registration for Placement

Once an organization shows interest in recruiting students of the Institute, it is required to fill the Job Announcement Form (JAF) giving details about the job and other details related to its registration. Once a company is registered, the JAF is uploaded on the OSP portal, and an email is sent to students announcing the new openings. Only registered students can view the job opening announcement. A list of student who shows their interest along with their resumes is shared with the Company. It is the sole responsibility of a student to keep her/his resume updated on the OSP Portal. Once the student is registered for a particular Company, she/he is not allowed to withdraw her/his candidature from remaining process related to that Company.

(a) Inviting Companies

Companies from the technology sector are invited to the campus, where the eligible students are facilitated to go through the entire selection process. The Institute provides a copy of the Placement Book, which gives brief details about Institute, courses offered, student profile, etc., to every organization along with the Job Application Form (JAF).

(b) Filling and Submission of JAF Form

If interested for Campus Hiring, companies are required to submit the duly filled JAF Form giving brief detail about the Company, Job Profile, Job Location, Eligibility Criteria etc. and submit the same within the stipulated time period, so that the suitable dates can be allotted.

(c)Finalization of Dates

The dates are finalized based on the different parameters like:
(1) Job Description and growth prospects;
(2) Compensation package offered,
(3) Past record of the recruitment, and
(4) Profile of the Company.

The slots are given according to the above mentioned parameters.

(d) Announcement of Dates and Registration of the students for specific companies

Once the dates are finalized, the list of the companies along with the dates allotted, job profile, selection procedure and other details mentioned in the JAF form is shared with the students for registration for the respective company. The students are asked to register on or before the time period mentioned by the OSP and the lists of the students are shared with the companies.

(e) Logistics Arrangement

On receiving the confirmation from the end of the company, completed information about the panelist, travel itinerary, Interview rooms, Selection Procedure, Interview Rooms and Guest House Accommodation and Local Transportation are collected. Preparations are made accordingly. Subsequently, the said information of the dates of visit and the selection procedure is announced to the registered students, and other offices of the Institute for logistics arrangements.

2.2.4 Visit of Companies to Campus

The arrangements for conducting the Pre-Placement Talks, Group Discussion, Written Tests and Interviews are made. The company is provided detailed information of the venue and other logistics requirement are also been taken care to ensure smooth flow of placement activity. OSP also ensures that the placement norms are followed properly by both parties during the day, of visit.

2.2.5 The Placement Process

The six main section of the placement process includes:

(a) Pre-Placement Talk

This is generally a pre-placement talk where the representatives of the company present a brief overview about Company's Profile, Accomplishments, major products/services, Job Profile etc. All the queries regarding the Job Profile, Package offered, Components of the Pay Package, Location of Placement, Bond if any, are addressed. The PPT is conducted before the Interview process begins to give the opportunity to clear all their doubts and for smooth flow of Interview process.

(b) Online or Written Tests

Companies conduct Online or Written Tests for further shortlisting. The Test can be further divided into Aptitude test which consists of basic problems in quantitative ability, logical reasoning and verbal ability and Technical tests. Details about the duration, pattern of the tests are taken from the Companies. Some companies may have cut-offs in all sections, while some may have no negative marking. So details are collected beforehand about the format of the test.

(c)Group Discussions

Not all companies take a Group Discussion, but few companies with high packages take GD. GD is conducted usually between 8 to 10 candidates depends upon the co mpany. There will be panel of experts monitoring the group discussion and the duration may vary from 20 to 30 minutes. They give makers on the basis of your content and conduct.

(d) Interviews

Interview is the final step in the selection process. The interview process followed is different among companies. Different companies have different rounds of Interviews based upon their preference. Some may take single interview for Technical and HR or some may prefer separate interviews also. Hence, the information about the Interview Round and duration of the rounds are collected well in advance.

(e) Declaration of Results

At the end of the process, the companies are required to announce the results only through the OSP. Once the Student is made an offer by a company, she/he is out of the placement procedure for the rest of the Placement Season, unless otherwise announced by due process of the Institute. After completion of the process, the OSP facilitates a formal meeting of Faculty Members of the B.Tech. Program with companies depending on their specialization and availability.

(f) Online Feedback Form

Once the entire process is completed, the Institute will request the company to provide online feedback. The said form shall include the details about the feedback of the students, their conduct, technical knowledge, logistics arrangements and an overall feedback of the Institute. The form will be kept confidential and viewed by the Chairman – Office of Student Placements for further analysis and future course of actions.

2.2.6 Post Placement Process

The OSP acts as a bridge between the Company and Students of the Institute for completing all formalities related to their offer letters, date of joining etc, till the time they join the Company.

(a) Data Updation

The data of the selected students is updated on the OSP Portal for preparing placement statistics and further decision making. At the end of every year, the placement statistics are updated and forwarded to respective departments.

(b) Data Analysis

The feedback received from the companies are analyzed and the required measures are taken for further improvements in the process.

The recruited students can join their employers after completing all requirements for the Award of the Degree by the Institute; and further this process usually concludes by the end of May in the following year.

2.3 Students Eligible for Placements

This year we place before you for your consideration 194 students distributed among different Programs who are eligible for seeking placement through the Institute. In addition to these student, Ph.D. students shall also be available for Placement based on the submission of their Thesis. The distribution of the students in the different disciplines is as below:

B.Tech. (Computer Science & Engineering)	41
B.Tech. (Electrical Engineering)	34
B.Tech. (Mechanical Engineering)	36
M.Sc. (Physics)	14
M.Sc.(Chemistry)	17
M.Sc. (Mathematics)	15
M.Tech. (Mechanical Engineering)	3
M.Tech. (Electrical Engineering)	24
M.Tech. (Bioscience and Bioengineering)	9
Total number of Students eligible for Placements (Batch 2019)	**194**

2.4 Past Recruiters

Private Industries

3DPLM Software Limited
Aasaan Jobs Private Limited
Aakash Educational Service Limited
Allgo Embedded Systems
Amadeus Software Labs
Angara Ecommerce Private Limited
Amazon.com
Anglo Eastern Ship Private Limited
Arm Embedded Technologies Limited
Barclays
Cairn India
Cisco Systems
CMC Limited
Cocubes.com
Cognizant Technology Solution Corporation
CRISIL Limited
C42 Engineering Private Limited
DE Shaw & Company
DIRECTI
Drishti Software Solutions Private Limited
Flipkart.com
Finisar Corporation
Fluidyn Instruments Private Limited
Free Scale Semiconducter
Future Supply Chain Solutions Limited
Futures First
Goldman Sachs
Google
Grofers
Grident Technologies Private Limited
Gyan Central
Havells India Limited
HCL Technologies

Infosys
Ittiam Systems Private Limited
Ignite World Private Limited
Ishi Systems
Jindal Steel and Power
Kritikal Solutions Private Limited
Larsen & Tourbo
Larsen & Tourbo ECC
Nagarro Software Private Limited
NBC Engineering Industries Limited
National Instruments Corporation
Navyug Solutions Limited
Nucleus Software Exports Limited
Oanda Financial Services
Oracle Financial Service Corporation
Practo Technologies Private Limited
Renault Nissan
Resonance Eduventures Limited
Samsung India Software Operations
Samsung India Software Centre
Samsung Software Engineering Lab
Sigmoid Analytics Limited
Steelwedge Technologies Private Limited
Snapdeal.com
STMicroelectronics
Tata Consultancy Services
Tata Motors Private Limited
Trident Group
Voyalla Retail Private Limited
Volvo Eicher
Libsys Limited
Mahindra & Mahindra Limited
Maxheap Technologies
Microsoft Corporation
Misys Software Solutions Private Limited
Morgan Stanley

Hindustan Petroleum Corporation Limited

Honda Cars
Hyundai

Public Sector Enterprises

Bank of India
Bharat Petroleum Corporation Limited
Bharat Heavy Electrical Limited
Coal India Limited
Defence Research Development Organization

Indian Army
Indian Navy
Indian Space Research Organization
Indian Oil Corporation Limited

Power System Operation Corporation

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