



Guru Nanak Institute of Technology



Student Handbook

Academic Year : 2020-2021



University Grants Commission



NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION



NATIONAL BOARD OF ACCREDITATION



ARJUNA DULI KALAM AZAD UNIVERSITY OF TECHNOLOGY
WEST BENGAL
In Pursuit Of Knowledge And Excellence





Vision of the Institute

To ignite young minds with creativity and empowering lives and educate them to produce a galaxy of young professionals of outstanding ability who can become leaders in their profession and responsible citizens who can meet the challenges faced by the society



Mission of the Institute

To meet the demands for skilled manpower on a global basis in the field of engineering, technology and management

To inculcate amongst the students and inspire them to take up higher studies and research

To impart high quality education by providing the ambience needed for developing requisite skill for excellence in education and industry



CONTENTS

GNIT at a Glance

Message from the Principal

Leadership & Management at GNIT

Academic Calendar 2020-2021

Admission at GNIT

Teaching Learning

- Teaching learning paradigm
- Method of Curriculum enrichment
- Curriculum Structures
- Online class

Departments at a Glance

- Department of Computer Science & Engineering
- Department of Electronics & Communication Engineering
- Department of Electrical Engineering
- Department of Food Technology
- Department of Information Technology
- Department of Electronics and Instrumentations Engineering
- Department of Applied Science and Humanities
- Department of Computer Application
- Department of Hospital Management

Scholarships

Code of Conduct for Students

GNIT Policy for Payment of Fees

Fees payment Procedure

Teaching, Learning and Assessment

Examination system

Project Based Learning

Blended Learning

B.Tech with Honours Facility

NPTEL certification

Facility for Higher Study

Beyond Curriculum Training

Industry visit

Placement Details

Research and Development Facilities

- Students Publications
- Patent & IPR
- Innovative Project Work

Students Chapter

- SESI
- IE
- ISTE
- IEEE
- National Cyber Security Cell

Mentorship

Library facilities

Collaborations

Internship Facilities

Institution Innovation Council

- Preincubation
- EDC
- Startup
- Innovation cell

Academic Exchange Program

Food and Beverage Facilities

Students' Common Rooms

Bank/ATM

Security

Hostel Facility

Gymnasium & Sports Facilities

Anti-Ragging Regulations

Committee

- Women Grievance Committee
- Student Discipline Committee
- IQAC cell
- Student Council

Student Societies & Clubs

- Coding Club-Biit2byte
- Photography Club
- Cultural Club
- Technical Fest Club
- National Service Scheme

GNIT at a Glance

Guru Nanak Institute of Technology (GNIT) was instituted with a vision of empowering the aspiring professionals with technological knowledge coupled with professional expertise. GNIT, established in 2003, is a unit of JIS Group Educational Initiatives, a premier education service provider in West Bengal, having 30 Institutions; 25,000 students; offering 72 academic programmes.

This Technical Campus offers undergraduate and post graduate courses under MAKAUT and few of the courses are NBA accredited. The Institute, located at one of the prime locations in North Kolkata - Sodepur, is approved by AICTE and is accredited by UGC, NAAC.



The Institute offers latest technology-oriented dynamic courses, keeping in sync with the industry trends, and it nurtures creativity, innovation, and research initiatives both at faculty and students' level, to enrich and enhance the ever-evolving teaching-learning process. This approach equips the students to keep pace with the dynamic evolution and the constant changing demands of both science and technology--both in academics and in the work fraternity.

The trend setting academic endeavors of GNIT have produced some of the finest scholars and ace industry professionals. The college alumni are working creditably well and have brought fame and laurels for both the institute and for themselves.

GNIT commits itself to high standards of personal and intellectual integrity - - embraces the principles of freedom and rigor in scholarly inquiry, and asserts the importance of holding to the truths such inquiry reveals.



Message from the Principal's Desk

The enriching odyssey of teaching-learning process at Guru Nanak Institute of Technology began in 2003, under the aegis of JIS Educational Initiatives. At GNIT, all aspects of our educational processes are carefully designed to cultivate and stimulate the intellectual, social, and personal development of the most important stakeholders at this institution -- our students.



At our institute, we provide an atmosphere for multifaceted development where students are encouraged to channelize their potential in the pursuit of excellence. GNIT is committed to the complete development of a student; this includes academic knowledge, social skills, intellectual curiosity, and a special emphasis on self-discovery. While academic excellence is our major thrust, the college is also devoted to preparing students for life, groom them to face the challenges of tomorrow, and encourage them to be socially relevant.

We foster a positive spirit and believe in partnership between students, faculty, parents, and support staff striving to create a milieu that sustains excellence. Our distinction lies in the pursuit of high academic attainment through support, encouragement, praise, and motivation.

I heartily welcome you all to GNIT and wish you a very bright and an opulent career!

**Prof (Dr) Santanu Kr. Sen
Principal, GNIT**

Leadership & Management at GNIT



Prof(Dr.) Santanu Kumar Sen
The 1st Professional Engineer (P.Eng) in INDIA under Computer Science
Division from Institution of Engineers, India
B.E(CSE), M.Tech(CSE), MBA(IS), PhD(Engg), C.Eng(I), P.Eng(I), FIET(UK),FIE(I), FIEC(USA), FIETE(I), SMIEEE(USA), SMCSI, LMISTE, MACM(USA), FNBPSP

Principal
Guru Nanak Institute of Technology

Prof(Dr.) Santanu Kr Sen has around 25 years of experience in the field of Computer Science and Engineering including 8 years in Industry and 17 years in Engineering Academia including Abroad. He is the Board Member of West Bengal Joint Entrance Board (WBJEEB)since 2015. His name was enlisted in the Marquis Who's Who in the World in Science & Engineering for the year 2012. He is the Recipient of many distinguished National and International Awards like Rashtriya Shiksha Gourav Puroskar, Indira Gandhi Sadbhavna Award, Bharat Bibhushan Samman Puraskar and many more.... He has 100+ Research Paper publications, 8 Patents and multiple research grants from different government and non-government agencies. He executed several Industry projects in the country and abroad.

Leadership & Management at GNIT



Prof. (Dr.) Arun Kr. Mondal
B.Tech in Radio physics and Electronics from CU, M.E in ETCE from JU, Ph.D in Engineering - ETCE, from JU,FIE(Fellow of The Institution of Engineers,India)

Dr. Arun Kumar Mondal worked as an Executive Engineer of R&D Section in Sonodyne Electronics Co. Pvt. Ltd. over 10+ years and also as an Assistant Manager (Tech. Purchase) and Section head of ISO 9001 Audit Team in Bells Control Ltd. Kolkata (An ISO 9001 certified company) from January 1996 to September 1999. He is working at Guru Nanak Institute of Technology, over 16+ years in the field of Electronics & Communication Engineering. He is a renounced personality in Electronics field who achieved many distinguished National and International Awards. He has almost 50+ Research Paper publications. He has published multiple no of Patents, Book chapters and research grants from different government and non-government agencies. Under his supervision 2 research scholars are doing Ph.D work and one scholar is awarded the degree. As a Fellow he is an active member of The Institution of Engineers, India.

Controller of examination
Guru Nanak Institute of Technology

Dr. Adhish Kumar Chakrabarty, presently the Registrar of Guru Nanak Institute of Technology, has been teaching engineering for 16+ years. He has B.Tech in Instrumentation Engineering and holds a master's degree in Control System Engineering. He has received Ph.D for his research work in the area of Robust Model Reference Adaptive Control. His areas of interest in research are model reference adaptive control, and process control. He has worked as a reviewer for many international journals of repute. He has successfully completed a project funded by UGC. His technical innovation has led to grant of patent. He maintains that the undergraduate engineering students see the world of engineering through the pages of text books, which often results in good theoretical knowledge but little engineering skill. As a teacher he tries is to make engineers out of students, who have both knowledge and skill.



Dr. Adish Chakroborty
B.Tech., M.Tech., Ph.D. (Tech.)

Registrar
Guru Nanak Institute of Technology

Leadership & Management at GNIT



Dr. Sunipa Roy
Senior Member, IEEE(USA)
Corporate Member IE (I),
Member of IEEE- Green Community, Member
of IEEE (WE),
C.Engg (IE), Life Member, ISTE ,
Life Member, I2OR.
Member, Graphene Council
B.Tech(ECE), M.Tech(ECE), PhD(Engg), C.Eng(I)

Dr Sunipa Roy received her PhD degree from Jadavpur University, Electronics and Telecommunication Engineering department in 2014. She is the recipient of National scholarship from Govt of India, Junior research fellowship from DST Govt of India and Senior research Fellowship (Direct) from CSIR, Govt of India. Her current research interest includes MEMS, Graphene, RRAM, Supercapacitor and Gas Sensors. Dr. Roy is the senior member of IEEE, IEEE Green community, IEEE Women's in Engineering, Special Member of I2OR, India, Corporate member of IE (India) and published several patents and journals. She is the Institute Ambassador and mentor of Institutions innovation council of MHRD. Dr Roy is the Principal Investigator of several funded projects.

Head of the Department
Department of Electronics & Communication
Engineering
Guru Nanak Institute of Technology

Dr. Sangeeta Bhattacharya has around 9+ years of experience including 5+ years in academia and 4 years of research experience.

She completed her Ph.D. from National Institute of Technology, Tiruchirappalli. She is a Gold Medallist and University Topper in M.Tech. under WBUT. She has published 10+ research papers in International Journals and Conferences. Also, she is a member of IEEE Society. Dr. Bhattacharaya is the member of IEEE. She has published patents and acted as the session chair for many international conferences. She is the mentor of Institutions innovation council of MHRD. Presently, supervising one Ph.D. student under MAKAUT.



Dr. Sangeeta Bhattacharya
B.Tech. (CSE), M.Tech.(CSE), PhD(Engg.),
IEEE

Head of the Department
Department of Computer Science and
Engineering
Guru Nanak Institute of Technology

Leadership & Management at GNIT



Dr. Sucharita Chakrabarti
B.Sc(Hons), M.Sc, Ph.D(Sc.)

*Dr. Sucharita Chakrabarti, present Head of the Department of Applied Science and Humanities. She has been teaching mathematics to undergraduate and post-graduate students of various disciplines for **18+ years**. After completion of B.sc (Hons.) and M.Sc in Mathematics, she has received Ph. D degree for her work in the area of Generalized Topological Spaces. She has also carried out research works in applying the techniques of graph theory in the analysis of crystals. She has also successfully completed **research project funded by UGC**. She is **life member of The Indian Statistical Institute (ISI), Kolkata, Life member of The Indian Science Congress, Life member of Calcutta Mathematical Society**.*

Head of the Department
Department of Applied Science &
Humanities
Guru Nanak Institute of Technology

*Dr. Kakali Bandyopadhyay has around **20 years of teaching experience** in the field of Food Technology and allied field with more than **21 years of research experience**.*

*She has undertaken Research work as Senior **Research Fellow under CSIR, Govt. of India**. She has **50+ Research Paper publications, 4 Patents and multiple research grants** from different government and non-government agencies. She has brisk activities as the prestigious Member of **Indian Chamber of Commerce (ICC), Confederation of Indian Industries (CII), Oil Technologists' Association of India (OTAI), Public Service Commission, West Bengal (PSC, WB), Institute of Engineers (IE)** etc. She is the Doctoral Research Guide of a couple of Research Scholars and also associated with various universities like, **Calcutta University, West Bengal University of Animal Sciences & Fisheries, Maulana Abul Kalam Azad University of Technology (MAKAUT), Bundelkhand University, Jhansi, Various Govt. Diploma colleges, Indian Institute of Packaging, MSME etc.** in various positions. She has received "Teacher of the Year 2017" for the contribution in Teaching, Learning and Research by **MAKAUT** on 5th September, 2017*



Dr. Kakali Bandhapadhyay
B.Tech., M.Tech., Ph.D. (Tech.)

Head of the Department
Department of Food Technology
Guru Nanak Institute of Technology

Leadership & Management at GNIT



Mr. Sudeep Ghosh
B.Tech (IT), M.Tech (IT), IE(I)

Head of the Department
Department of Information Technology
Guru Nanak Institute of Technology

*Mr Sudeep Ghosh, Head of the department, Dept of Information Technology, Guru Nanak Institute of Technology, has completed B.Tech in Information Technology, from WBUT (presently MAKAUT) in year of 2008, and M.E. in Information Technology from Indian Institute of Engineering Science & Technology, Shibpur (IEST) in the year of 2011. He is currently pursuing PhD from Indian Institute of Information Technology, Kalyani. He is life time **Associates Member of Institute of Engineers (IE)**. He has around **20 research paper** in reputed journal and conferences and **2 patents**. He has acted a reviewer of various reputed journals & conference He has more than nine years of academic experience and his current research interests includes **Classical Cryptography, Cloud Security, Information Security**.*

*Dr. Barnali Kundu, Head of the Department of Electrical Engineering, Guru Nanak Institute of Technology, Sodepur, Kolkata has more than **15 years teaching experience** in the academic Field. She has been awarded with a **Doctoral Degree from Indian Institute of Engineering, Science and Technology (IEST)**, Shibpur, Howrah and has completed her Master of Engineering from Indian Institute of Engineering, Science and Technology, Shibpur, Howrah (Formerly BESU). She has served as a **Senior Research Fellow** in the DST project in IEST, Shibpur. She has many research paper publications in Journals. She has presented many papers in IEEE Conference & won the Best Paper award. She has **filed 4 patents** and applied projects in AICTE & DST. She is a **member of IEEE Power & Energy Society, Solar Energy Society of India (SESI)** and also a **fellow member of Institute of Engineers (India)**. She has organized International Conferences, Faculty Development Programme, Hands on Workshop, Technical fest etc associated with Solar Energy Society of India (SESI) and Institute of Engineers (IE).*



Dr. Barnali Kundu
B.Tech., ME., Ph.D. (Tech.)

Head of the Department
Department of Electrical engineering
Guru Nanak Institute of Technology

Leadership & Management at GNIT



Dr. Sucharita Bhattacharyya
B.Sc. (Physics Hons.), M.Sc. (Physics),
Ph.D. (Physics)
Post Ph.D. from ORNL, USA
Diploma
In-charge
Guru Nanak Institute of Technology

*Dr. Sucharita Bhattacharyya, Associate Professor of Physics, with **27+ years of experience** in the field of Physics and related area including Research & Developmental activities and teaching in Engineering college.*

Dr. Bhattacharyya is a Life Member of Indian Physical Society & recipient of National Awards including Merit Scholarships from Government of West Bengal and CSIR as well as DST Research Fellowship from Government of India. She has around 40 Research publications in peer-reviewed journals and National & International Conferences and as Book chapters. She has been awarded research grants from agencies like UGC, AICTE, and DST, Government of India to execute various Scientific Projects. She assisted research work in an USA National Project at Oak Ridge National Laboratory with fellowship from University of Tennessee, USA. As empaneled supervisor of MAKAUT. she guided successfully her research scholar to obtain his Ph. D. degree.

*Ms. Bapita Roy, the Head of the Department of Applied Electronics & Instrumentation Engineering. She is associated with GNIT since 2007. She completed her B.Tech in Instrumentation Engineering and M.Tech in Instrumentation & Control Engineering from department of Applied Physics , University of Calcutta. Currently engaged in her research work on **Plasmonics Sensors Design** in University of Calcutta. Her area of research is mainly focussed on the design and analyse the Surface Plasmon Based Integrated Optical Waveguide. She has **several Scopus Indexed and SCI Journal publications and conference papers**. Ms. Roy has a published **patent** in her area of research work in the year of 2018. She got a **AICTE funding of Rs. 4.29 Lacs to conduct a STTP on “Green IoT for Green Environment”** in the January 2021. Students are doing several Innovative projects under her guidance and participated in the several National Competition like **AICTE Chattra Viswakarma, Smart India Hackathon etc.***



Ms. Bapita Roy
M.Tech (Instrumentation & Control Engg., C.U.), B.Tech (Instrumentation Engg., C.U.), MIE(I)

Head of the Department
Department of Electronics and
Instrumentation Engineering
Guru Nanak Institute of Technology

Leadership & Management at GNIT

Mrs. Debashruti Ganguly has around 13 years of experience in the field of Hospital Management in Academia.

She received Bronze Medal. She has 15+ Research Paper publications. Ms. Ganguly is awarded by MAKAUT as a Bronze Medalist for the 3rd ranker in the Bachelor Of Hospital Management in the year of 2008. She is associated with many Industrial Project Works done.



Ms. Debashruti Ganguly
BHM, MBA(HR), MHM

Head of the Department
Department of Hospital Management
Guru Nanak Institute of Technology



Mr. Chiranjeeb Dutta
B.Sc. (Mathematics Hons.), MCA,
ME(CSE),
MCSI, MCEGR

Head of the Department
Department of Computer Application
Guru Nanak Institute of Technology

Mr Chiranjeeb Dutta has around 17+ years of experience in the domain of Computer Applications and Computer Science including Industry and Academia.

He is the SPOC of NPTEL Local Chapter (MHRD, Govt. of India) at Guru Nanak Institute of Technology and also the Coordinator of Internshala (official internship partner of AICTE). He is a member of Academic Council, GNIT. He has been appointed as Head examiner, Paper Setter, Evaluator, Moderator, External Examiner by several Universities like MAKAUT, Vidyasagar University, IGNOU, PTU etc. He is also an empanelled Observer of NTA (MHRD, Dept. of Higher Education, Govt. of India)

He has 6 Research Paper publications, and n Patents. He has under gone several FDPs and STTPs throughout his career.

Academic Calendar of the Institute

Day	Month	Day	Routine Activity for 4 th , 6 th & 8 th Semester	Particulars 4 th , 6 th & 8 th Semester	Routine Activity for continuing 1 st Year	Particulars for 1 st Year and lateral 3 rd Semester
01	1 st Feb	Monday	JISSAMMAN		JISSAMMAN	
02 - 06	2 nd Feb – 6 th Feb	Tuesday - Saturday	Semester Break		Teaching Day 53 - 57	
07	7 th Feb	Sunday	Weekly off			
08 - 11	8 th Feb – 11 th Feb	Monday - Thursday	Teaching Day 1 - 4	Registration ongoing 4 th , 6 th & 8 th Semester	Teaching Day 58 - 61	
12 - 13	12 th Feb – 13 th Feb	Friday - Saturday	Teaching Day 5 - 6		Teaching Day 62 - 63	
14	14 th Feb	Sunday	Weekly off			
15	15 th Feb	Monday	Teaching Day 7		Teaching Day 64	
16	16 th Feb	Tuesday	Holiday		Saraswati puja	
17 - 18	17 th Feb – 18 th Feb	Wednesday - Thursday	Teaching Day 8 - 9		Teaching Day 65 - 66	Distribution of assignment
19 - 20	19 th Feb – 20 th Feb	Friday - Saturday	Teaching Day 10 - 11		Teaching Day 67 - 68	[Submission of Q paper of Slot/Unit Test]
21	21 st Feb	Sunday	Weekly off			
22 - 25	22 nd Feb – 24 th Feb	Monday - Wednesday	Teaching Day 12 - 14		Teaching Day 69 - 71	
25 - 26	25 th Feb – 26 th Feb	Thursday - Friday	Teaching Day 15 - 16		Teaching Day 72 - 73	Slot/Unit Test
27	27 th Feb	Saturday	Teaching Day 17	Announcement of Semester Result	Teaching Day 74	Slot/Unit Test
28	28 th Feb	Sunday	Weekly off			
29	1 st Mar	Monday	Teaching Day 18		Teaching Day 75	
30 - 31	2 nd Mar – 3 rd Mar	Tuesday - Wednesday	Teaching Day 19 - 20	Distribution of project	Doubt clearing session	Exam Form Fill up 1 st year
32	4 th Mar	Thursday	Teaching Day 21	Monthly Review Meeting	Doubt clearing session	Exam Form Fill up 1 st year
33	5 th Mar	Friday	Teaching Day 22		Doubt clearing session	[Distribution of Answer script- 1 st Slot/Unit Test]
34	6 th Mar	Saturday	Teaching Day 23	Parent Teacher Meeting	Doubt clearing Session	Parent Teacher Meeting [Distribution of Answer script- 1 st Slot/Unit Test]

35	7th Mar	Sunday	Weekly off			
36	8th Mar	Monday	Teaching Day 24	[Distribution 1st Assignment]	Study leave	[Distribution of Answer script-Slot/Unit Test]
37	9th Mar	Tuesday	Teaching Day 25	[Distribution 1st Assignment]	Study leave	Mock Test 1st year, Exam Form Fill up Lateral 3rd Sem
38	10th Mar	Wednesday	Teaching Day 26	[Submission of Q paper-Slot/Unit Test 1]	Study leave	Mock Test 1st year Exam Form Fill up Lateral 3rd Sem
39	11th Mar	Thursday	Teaching Day 27	[Submission of Q paper-Slot/Unit Test 1]	Assessment of Sessional & Lab	Lab examination
40	12th Mar	Friday	Teaching Day 28		Assessment of Sessional & Lab	Lab examination – 1st year Mock Test – Lateral 3rd Sem
41	13th Mar	Saturday	Teaching Day 29	[Seminar – ECE, EIE, Physics]	Assessment of Sessional & Lab	Lab examination – 1st year Study leave – Lateral 3rd Sem
42	14th Mar	Sunday	Weekly off			
43	15th Mar	Monday	Teaching Day 30	[Innovative Idea competition Dept - ECE, CSE, IT, CA, EIE]	Assessment of Sessional & Lab	Lab examination – 1st year Study leave – lateral 3rd Sem
44	16th Mar	Tuesday	Teaching Day 31	[Innovative Idea competition Dept – EE]	Study leave	Lab examination – 1st year Study leave – Lateral 3rd Sem
45	17th Mar	Wednesday	Teaching Day 32	[Submission of 1st Assignment]	Study leave	Lab examination – 1st year Study leave – Lateral 3rd Sem
46	18th Mar	Thursday	Teaching Day 33	[Submission of 1st Assignment] [Distribution of Topic for Debate/ PPT/GD]	Semester Examination	Semester Theory Examination 1st year and Lateral 3rd Sem
47	19th Mar	Friday	Teaching Day 34		Semester Examination	Semester Theory Examination 1st year and Lateral 3rd Sem

48	20th Mar	Saturday	TeachingDay35	Final Evaluation of Innovative Idea Competition	Semester Examination	Semester Theory Examination 1st year and Lateral 3rd Sem
49	21st Mar	Sunday				
50 - 52	22nd Mar – 24th Mar	Monday - Wednesday	TeachingDay36 - 38		Semester Examination	Semester Theory Examination 1st year and Lateral 3rd Sem
53 - 55	25th Mar – 27th Mar	Thursday - Saturday	TeachingDay39 - 41	Slot/Unit Test -1	Semester Examination	Semester Theory Examination 1st year and Lateral 3rd Sem
56	28th Mar	Sunday	Holiday		Dolyatra	
57	29th Mar	Monday	Holiday		Holi	
58	30th Mar	Tuesday	Teaching Day 42			Practical examination Lateral 3rd Sem
59 - 60	31st Mar – 1st Apr	Wednesday - Thursday	Teaching Day 43 - 44	Debate/GD/PPT Competition		Practical examination Lateral 3rd Sem
61	2nd Apr	Friday	Holiday		Good Friday	
52	3rd Apr	Saturday	Teaching Day 45	[Parent-Teacher Meeting]		[Parent-Teacher Meeting]
53	4 th Apr	Sunday				
54	5 th Apr	Monday	TeachingDay46	MonthlyReviewMeeting	TeachingDay1	Commencement of classes for 2 nd semester and Lateral 4 th Sem
55 - 56	6 th Apr – 7 th Apr	Tuesday - Wednesday	TeachingDay47 - 48		TeachingDay2 - 3	
57	8 th Apr	Thursday	TeachingDay49		TeachingDay4	[Registration 2 nd semester and lateral 4 th Sem]
58 - 59	9 th Apr - 10 th Apr	Friday - Saturday	TeachingDay50 - 51	[DistributionofAnswerscript-1 st Slot/Unit	TeachingDay5 - 6	[Registration 2 nd semester and lateral 4 th Sem]
60	11 th Apr	Sunday				
61	12 th Apr	Monday	TeachingDay51		TeachingDay7	
62	13 th Apr	Tuesday	TeachingDay52	[Debate/GD/PPTCompetition]	TeachingDay8	

63	14 th Apr	Wednesday	Holiday		AmbedkarBirthday	
64	15 th Apr	Thursday	Holiday		BengaliNewYear	
65	16 th Apr	Friday	TeachingDay53	1 st Slot/UnitTest Result	TeachingDay9	
66	17 th Apr	Saturday	TeachingDay54	1 st reviewofProject	TeachingDay10	
67	18 th Apr	Sunday				
68	19 th Apr	Monday	Weeklyoff		TeachingDay11	
69 - 73	20 th Apr – 24 th Apr	Tuesday - Saturday	TeachingDay55 - 59		TeachingDay12 - 16	
74	25 th Apr	Sunday				
75 - 76	26 th Apr – 27 th Apr	Monday - Tuesday	TeachingDay60 - 61	[Distributionof 3 rd Assignment]	TeachingDay17 - 18	
78	28 th Apr	Wednesday	TeachingDay62	[Submission of Q paper- 2 nd slot/unitTest]	TeachingDay19	
79	29 th Apr	Thursday	TeachingDay63	[Distribution of 2 nd Assignment]	TeachingDay20	
80	30 th Apr	Friday	TeachingDay64	[Parent-TeacherMeeting]	TeachingDay21	Announcement of Semester Result
81	1 st May	Saturday	Holiday	InternationalLaborDay	MAYDAY	
82	2 nd May	Sunday				
83	3 rd May	Monday	TeachingDay65		TeachingDay22	
84	4 th May	Tuesday	TeachingDay66	Monthly ReviewMeeting	TeachingDay23	Monthly Review Meeting
85	5 th May	Wednesday	TeachingDay67	[Seminar– English,Mathematics]	TeachingDay24	
86	6 th May	Thursday	TeachingDay68		TeachingDay25	
87 - 88	7 th May – 8 th May	Friday - Saturday	TeachingDay69 - 70	[Submission of2 nd Assignment]	TeachingDay26 - 27	
89	9th May	Sunday				
90 - 92	10th May – 12th May	Monday - Wednesday	Teaching Day 71 - 73	2ND Slot/Unit Test	Teaching Day 28 - 30	1st Unit Test
93	13th May	Thursday	Holiday		Eid-Ul-Fitr	
94 - 95	14thMay – 15th May	Friday - Saturday	TeachingDay74 - 75	Registration (Backlog)Submissionof Qpaper	TeachingDay31 - 32	
96	16th May	Sunday				
97	17th May	Monday	DoubtClearingClass	Submission of Students feedback	TeachingDay33	
98	18th May	Tuesday	DoubtClearingClass	Submission of Students feedback[Distribution Answerscriptof2nd UnitTest]	TeachingDay34	
99	19th May	Wednesday	DoubtClearingClass	[Distribution Answerscriptof2nd UnitTest]	TeachingDay35	
100 - 102	20th May –	Thursday - Saturday	Study Leave	Exam Form Fill up	Teaching Day 36 - 38	

	22nd May					
101	21th May	Friday	Study Leave	Exam Form Fill up	Teaching Day 37	
102	22th May	Saturday	Study Leave	Exam Form Fill up	Teaching Day 38	
103	23th May	Sunday				
104	24th May	Monday	Assessment of Sessional & Lab	Lab Examination	Teaching Day 39	1st Unit Test Result
105	25th May	Tuesday	Assessment of Sessional & Lab	Lab Examination	Teaching Day 40	1st review of Project
106	26th May	Wednesday	Holiday	Lab Examination	Buddha Purnima	
107 - 109	27th May – 29th May	Thursday - Saturday	Assessment of Sessional & Lab	Lab Examination	Teaching Day 41 - 43	
110	30th May	Sunday				
111	31st May	Monday			Teaching Day 44	
112 - 114	1st June – 3rd June	Tuesday - Thursday	Semester Examination	Theory Exam	Teaching Day 45 - 47	
115	4th June	Friday	Semester Examination	Theory Exam	TeachingDay48	Monthly Review Meeting
116	5th June	Saturday	Semester Examination	Theory Exam	TeachingDay49	[Parent-Teacher Meeting]
117	6th June	Sunday				
118 - 123	7th June – 12th June	Monday - Saturday	Semester Examination	Theory Exam	TeachingDay50 - 55	
124	13th June	Sunday				
125 - 126	14th June – 15th June	Monday - Tuesday	Semester Break		Teaching Day 56 - 57	
127	16th June	Wednesday	Internship/Industrial Training		Teaching Day 58	
128 - 130	17th June – 19th June	Thursday - Saturday	Internship/Industrial Training		Teaching Day 59 - 61	2ND Unit /Slot Test
131	20th June	Sunday				
132 – 136	21st June – 25th June	Monday - Friday	Internship/Industrial Training		Teaching Day 62 - 66	
137	26th June	Saturday	Internship/Industrial Training		Teaching Day 67	Result of 2nd unit test
138	27th June	Sunday				
139 - 142	28th June – 1st July	Monday - Thursday	Internship/Industrial Training		Teaching Day 68 - 71	

143 - 144	2nd July – 3rd July	Friday - Saturday	Internship/Industrial Training		Teaching Day 72 - 73	Submission of Students feedback
145	4th July	Sunday				
146	5th July	Monday	Internship/Industrial Training	Monthly Review Meeting	Teaching Day 74	Monthly Review Meeting
147	6th July	Tuesday	Internship/Industrial Training		Teaching Day 75	
148 - 151	7th July – 10th July	Wednesday - Saturday	Internship/Industrial Training		Doubt Clearing Class	Exam Form fill up 1st year and 4th Sem lateral
152	11th July	Sunday				
153	12th July	Monday	Commencement of classes of ongoing batches for 5th and 7th Semester		Study leave	
154	13th July	Tuesday			Study leave	
155 - 158	14th July – 17th July	Wednesday - Saturday			Assessment of Sessional & Lab	Lab Examination
159	18th July	Sunday				
160	19th July	Monday			Study leave	
161	20th July	Tuesday	Holiday		BAKRI - EID	Holiday
162	21st July	Wednesday		Students Internship Program/Faculty Development Program	Study leave	
163 - 164	22nd July – 23rd July	Thursday - Friday		Students Internship Program/Faculty Development Program	Even Semester Exam	Theory Exam (2nd Semester) & 4th Semester Lateral
165	24th July	Saturday			Even Semester Exam	Theory Exam (2nd Semester) & 4th Semester Lateral
166	25th July	Sunday				
167	26th July	Monday			Even Semester Exam	Theory Exam (2nd Semester) & 4th Semester Lateral
168 - 170	27th July – 29th July	Tuesday - Thursday		Students Internship Program/Faculty Development Program	Even Semester Exam	Theory Exam (2nd Semester) & 4th Semester Lateral
171 - 172	30th July – 31st July	Friday - Saturday			Even Semester Exam	Theory Exam (2nd Semester) & 4th Semester Lateral

Admission Process at GNIT

B.Tech(CSE,ECE,ECM,EE,IT,FT)

4 Years B.Tech (GENERAL)

Eligibility Criteria:

Entrance Exam-WBJEE/JEE Mains/CEE-AMPAI

Educational Qualification: Candidates must have passed qualifying examination 10+2 level with Physics & Mathematics along with Chemistry/Bio/Comp Sc/Comp Application/Biotechnology as compulsory with individual pass marks (in both theory & practical) in all the 3 subjects as stated above in regular class mode & must have obtained 45% marks (40% for SC/ST/OBC-A,OBC-B,PwD) in the above three subjects taken together & passed English in the said qualifying examination.

3 years B.Tech (LATERAL ENTRY)

Eligibility Criteria:

Entrance Exam-WBJELET

Educational Qualification: Diploma/ B.Sc Degree (should have pass marks in Mathematics in 10+2 level) from any recognized University as defined by UGC having at 45% marks (40% for reserved category)

BBA(Hospital Management),BCA,B.Sc. (Data Science,Cyber Security)

3 years UG Courses

Eligibility Criteria

Entrance Exam- CET (Conducted by MAKAUT)

Educational Qualification:

For BBA in Hospital Management : Candidates must have passed 10+2 level or equivalent with English

For BCA, B.Sc in (Cyber Security & Data Science): Candidates must have passed 10+2 level or equivalent with English & Mathematics/Computer Application/ Comp Sc/ Information Practice/Statistics.

Direct Admission

(by appearing test,
conducted by GNIT)

Allotted through CET Counselling

Should have
Allotment letter
issued by CET

Heading towards
Registration Process

DIPLOMA (EE & ETCE)

3 years UG Courses

Eligibility Criteria

Entrance Exam- JEXPO

Educational Qualification: Candidates must have passed 10th level or equivalent with English, Physical/Science & Mathematics compulsorily securing at least 35% in aggregate as per AICTE norms excluding the marks of the subject taken as additional.

Direct Admission

Allotted through JEXPO Counselling

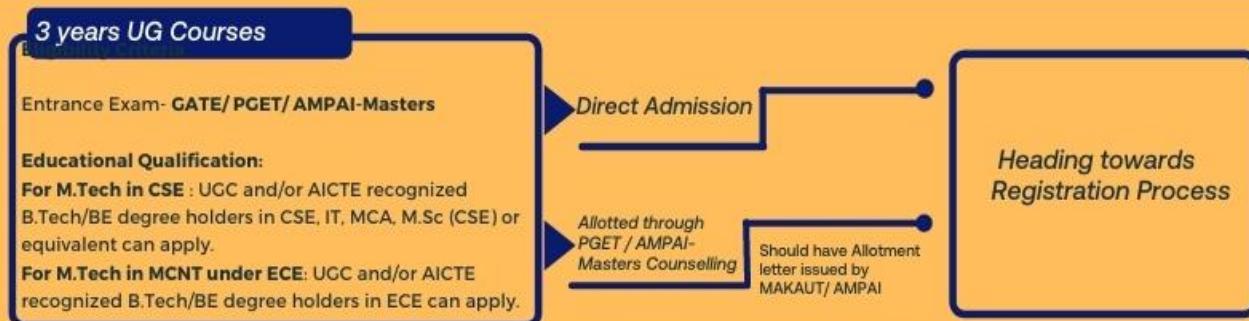
Should have
Allotment letter of
JEXPO counselling

Heading towards
Registration Process

MCA



M.Tech (CSE, MCNT)



Registration Process for Application for Admission (Applicable for all the courses)



1. Visit our college website at www.gnit.ac.in
2. Click on the Admission 2021 (a blue coloured box appearing at the top right corner of the page)
3. Then click on "1. New Registration".
4. Enter your Name, Valid Mobile No. and email ID
5. An OTP will send to your above mentioned Mobile No and email ID
6. Enter the OTP and click on " Save and Continue"
7. Click on "Next" (if logged out then click on "2. Continue Partially Filled form 2021" then enter your Application ID and Password)

Application Form Fill up



Fill all the details like 'Course Details', 'Family Details', 'Academic details' and then upload your photo and required documents as per the specified format and size and submit the application form.



Final Admission Process

1. Admission offer will be sent by the college authority after verification of the uploaded documents.
2. Log in again to accept the admission offer
3. After accepting the admission offer, College authority will approve your application and activate the payment option.
4. Then click on the "Process to Pay" and pay the requisite fees for admission.
5. After making the payment click on "Print" and get the Payment Receipt where student ID will be mentioned.

Teaching Learning Paradigm

In the Teaching Learning Paradigm, the purpose of our Institute is not to transfer knowledge but to create environments and experiences that bring students to discover and construct knowledge for themselves, to make students members of communities of learners that make discoveries and solve problems, and recognizing that the chief agent in the process is the learner.

The basic objective of GNIT is to produce graduates with some attributes so that, they can establish themselves with their full potential whether as global citizens or as leaders in an internationally competitive environment.

Teaching Learning strategies followed in the Institute

Innovative methods of teaching via role play, quiz, brainstorming session, field trips etc.,

Beyond Curriculum Training, Soft skill Training

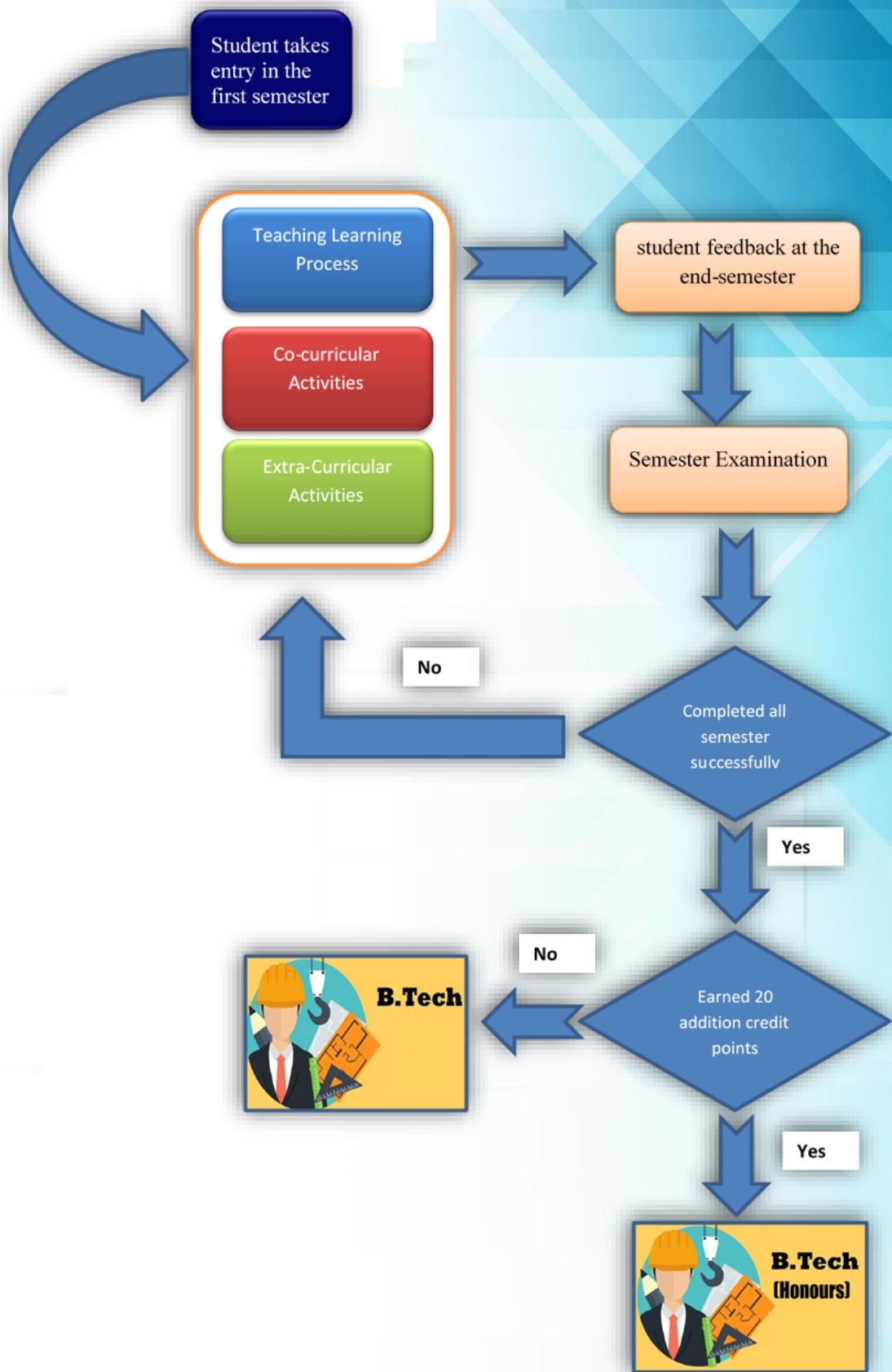
Experiential methodologies depending on the course and material

Project work and case studies. Participation in various national and International competition

Teaching via lecture, seminar and group-discussion formats

Learning by internship options during semester breaks.

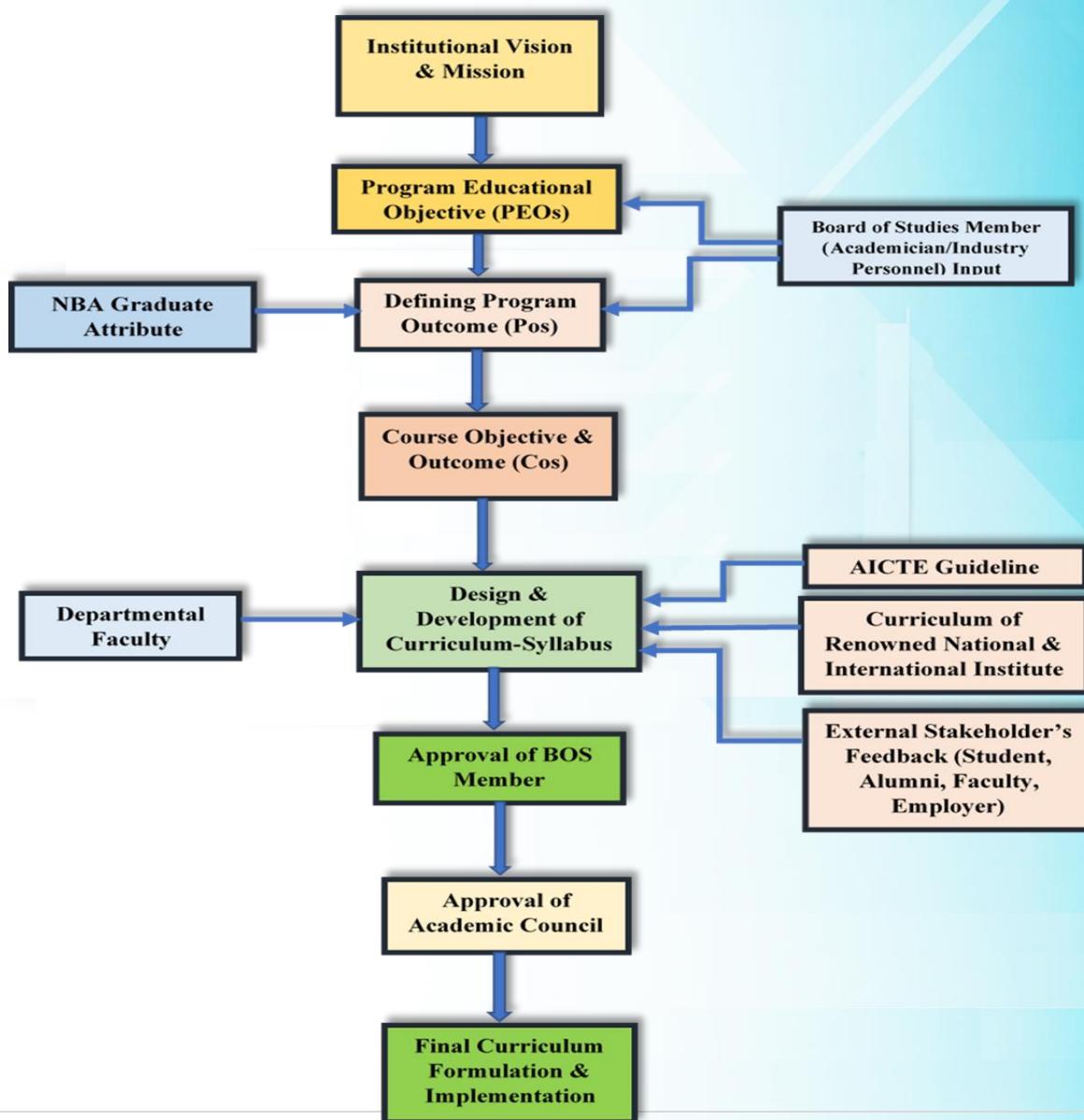
Teaching Learning Process at GNIT



Process of Curriculum Enrichment

Getting autonomy status by UGC, the institute ensures the main priority to the curricular development and its proper implementation in line with its vision. For that purpose, detailed comparative study is made with reputed universities and institutes and feedback from different stakeholders are gauged. Then under the guidance of a high level expert committee comprising of reputed academicians and industry mentors through departmental Board of Studies and Institutional Academic Council, the procedure of curricular framing/restructuring settles appropriate syllabus for various programs. Here the main focus is the emerging trends of the courses as well as industry requirements, both from national and global point of view and obviously to cater the local needs and to realize the core values.

The overall steps of the process is described by the flowchart.



Curriculum Structures

GNIT follows the curriculum structure as per the guideline mention by AICTE. According to this structure a range of credits from 150 to 160 for a student to be eligible to get Under Graduate degree in Engineering. A student will be eligible to get Under Graduate degree with Honours or additional Minor Engineering if he/she completes an additional 20 credits. These could be acquired through MOOCs.

Being an autonomous Institute, GNIT designed their syllabus under the guidance of the syllabus committee constitute by eminent academicians and industry persons.

B.Tech

The details syllabus for all BTech, MCA and MTech courses are available at

- ✓ Department of Computer Science & Engineering (CSE) (**Annexure 1**)
- ✓ Department of Electronics & Communication Engineering (ECE) (**Annexure 2**)
- ✓ Department of Electrical Engineering (EE) (**Annexure 3**)
- ✓ Department of Food Technology (FT) (**Annexure 4**)
- ✓ Department of Information Technology (IT) (**Annexure 5**)
- ✓ Department of Electronics and Instrumentations Engineering (EIE) (**Annexure 6**)
- ✓ Department of Computer Application (MCA) (**Annexure 7**)

BHM

For BHM course, GNIT follows the syllabus as mentioned by MAKAUT. (**Annexure 8**)

BCA

For BCA course, GNIT follows the syllabus as mentioned by MAKAUT. (**Annexure 9**)

DIPLOMA

For DIPLOMA courses, GNIT follows the syllabus as mentioned by WBSCTE.

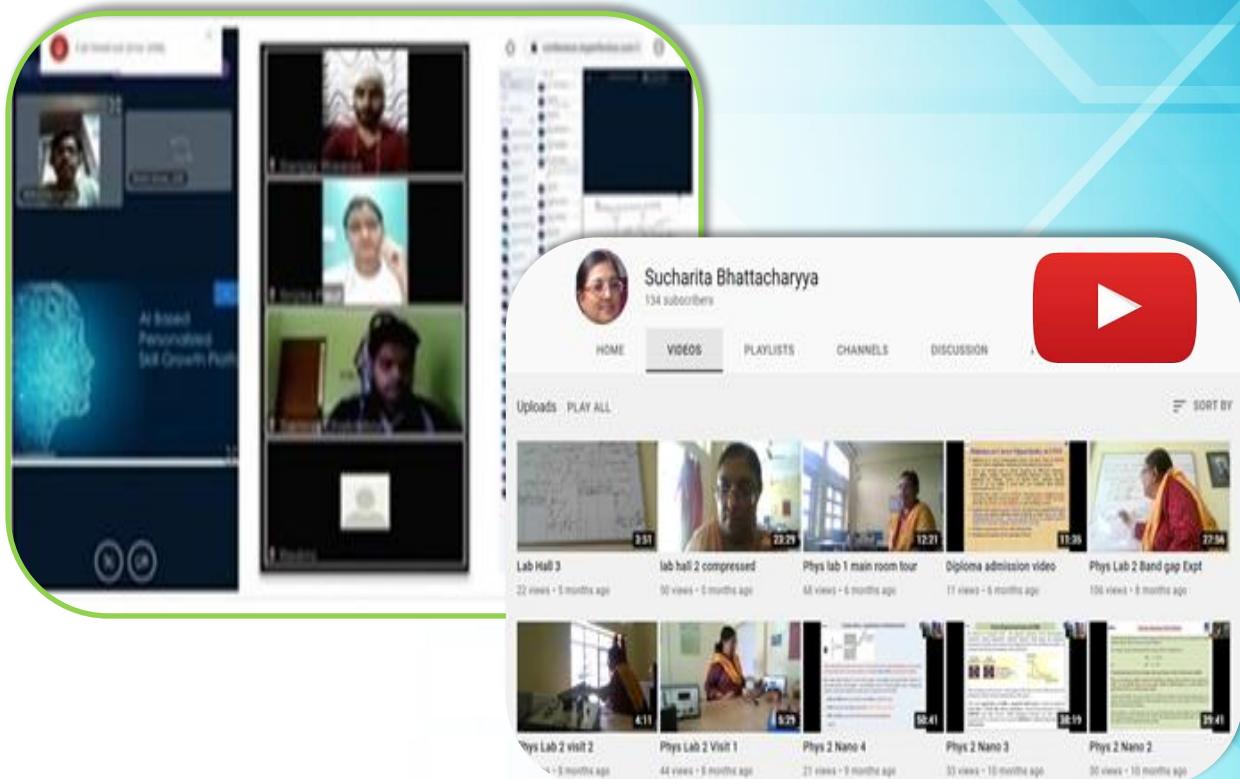
- ✓ Diploma in Electrical Engineering (DEE) (**Annexure 10**)
- ✓ Electronics & Telecommunication Engineering (DETCE) (**Annexure 11**)

Note: For more detail visit our website: www.gnit.ac.in

Online Classes

During the Lockdown crisis due to the spread of COVID-19 virus, colleges are still closed for offline activities. Faculties of GNIT have continued their teaching by using different online teaching platforms like *Whiteboard of Myperfectice*, *Cisco WebEx*, *Zoom*, *Google classroom*, *Google Meet* and various other ways and also provided *teaching materials, assignments* etc in the form of audio, audio-visual or other digital documentary modes.

JTA's have also taken their respective lab classes through different online portals like *VirtualLab*, *Whiteboard* etc. In regular basis they have also provided their lab assignments alongwith proper doubt clearing sessions.



Not only the regular online classes and labs, all the faculties of all the departments of the Institute have also prepared *Video Lecture Series* on the subjects that they have taken during the academic session 2020 - 21 by using different online platforms like *Cisco WebEx*, *Zoom*, *PowerPoint Presentation* and various other ways. JTAs of all departments have also prepared Video Lecture Series on their respective lab subjects through different online portals like *Virtual Lab*, *Zoom* etc.

Department of Computer Science & Engineering

The Department of Computer Science and Engineering was established in the year 2003 and provides a comprehensive research environment complemented by excellence in teaching. The Department has a number of qualified teachers who encourage the students to get engaged in several extra-curricular and co-curricular activities for them to be successful engineers. The Department of Computer Science and Engineering aims to bring up students as engineers; helping them to build, strong technical acumen, and harness their skills and talents through several cutting-edge technologies and state-of-the-art techniques.

Courses Offered:

- ✓ Four years B.Tech
- ✓ Two years M.Tech in Computer Science and Engineering.



Department of Electronics & Communication Engineering

The Electronics and Communications Department commenced in the year 2003. The programs offered by the department are accredited by NAAC. The program contents are upgraded on annual basis with involvement from industry experts, academia and reputed research institutions. Experienced faculty members all of whom are engineering postgraduates and most of them with PhDs as well, support three core specializations (VLSI & Microelectronics, Communication, Image processing & embedded system) in the Department.

Courses Offered:

- ✓ **B.Tech in four years**
- ✓ **Two years M.Tech in MTCT**
- ✓ Three years diploma program affiliated by WBSCTE.



Department of Electrical Engineering

The department of Electrical Engineering, Guru Nanak Institute of Technology, Kolkata-700114, has started its auspicious academic journey, under West Bengal University of Technology, presently, MAKAUT-West Bengal, from the year 2003. The department got NBA in 2009 and then again in 2014 for its excellent performance in the arena of technical education. The department has well-equipped Laboratories, qualified and experienced Faculty Members and Technical Staff to educate and train the budding engineers in the areas of Electrical Engineering, applied sciences and humanities, along with training courses on soft skills and aptitude, ensuring high campus placements and admissions into Institutes of higher learning and research.

Courses Offered:

- ✓ B.Tech in four years
- ✓ Three years diploma program affiliated by WBSCTE.



Department of Food Technology

The department of Food Technology was established in the year of 2006. Food Technology is the application of food science to the selection, preservation, processing, packaging and distribution of food. This is used to ensure that a safe, nutritious and wholesome food is made available to the consumer. Food Technologists study the physical, microbiological, and chemical composition of food as well as to develop food process technologies, its characterizations, preservation, packaging and storage of food, according to industry and government specifications and regulations.

Courses Offered:

- ✓ 4 years B.Tech in Food Technology.



Department of Information Technology

The Dept. of Information Technology, at the Guru Nanak Institute of Technology, Kolkata came into existence in the year 2007 for the benefit of Engineering, Science and Technology and the Nation on a larger scale. The department is renowned for its quality education, placement, discipline and very good learning environment for the students. Since its inception the department has been recognized for excellent in research and teaching. The department has a thriving research environment with active with active research groups in the areas of Artificial Intelligence, Bioinformatics, Complex and Social Networks, Data and Web Mining, and software Engineering. Graduates from the department are heavily recruited by both academia and industry, and ex-students of the department occupy top positions in both academia and industry all over the world.

Courses Offered:

- ✓ 4 years B.Tech in Information Technology.



Department of Electronics and Instrumentation Engineering

The department of EIE was established in the year 2003. This department emphasizes to create technical professionals who are keen to take engineering responsibilities with a vast knowledge of entire process, medical instrumentation and power plants – a specialization that has grown leaps and bounds in the recent years. The department is equipped with state-of-the-art laboratories to impart technical skill to the students to make them proficient engineers. Instrumentation engineering is a specialized branch of electrical and electronics engineering and it deals with the sensing, signal conditioning, measurement, control, Internet of things, Artificial Intelligence and as a whole automation of process industries. Apart from encompassing core subjects such as industrial instrumentation, process control, control theory, courses offered on bio-medical instrumentation, analytical instrumentation, **mechatronics, robotics, software development**, hardware topics like microprocessor and microcontroller-based Instrumentation, VLSI and embedded system designs, computer architecture and organization and computer based control of processes.

Courses Offered:

- ✓ 4 years B.Tech in Electronics and Instrumentation Engineering



Department of Applied Science and Humanities

The Department of Applied Science and Humanities is the key Service Department in the institute, looking after the entire B.Tech 1st Year batch in all Streams. The Dept has 16 full-time in-service teachers, with 8 Ph. D holders, 3 full-time technical assistants and a few supporting staff members. The faculty members, besides teaching and mentoring the 1st Year students, are also highly pro-active in research, and engaged in publications, presenting in seminars, conferences, workshops and webinars. They are also involved in research projects and members of professional associations and societies. The Dept also excels by reason of attracting dedicated and talented teachers and staff, who are research-active, conscientious, and continually strive to bring the Dept closer to an approximation of its goals and long-cherished objectives. The Dept is quite multi-faceted in its composition, and includes five collateral Sections, **Physics, Chemistry, Mathematics, English and Mechanical Science**, with a separate set-up and a Section-in-Charge.

Each Section has well-equipped and state-of-the-art laboratories under it, where students get hands-on practice in subject areas by performing live experiments under teacher supervision.



Department of Computer Application

Department of Computer Applications is devoted to study and research. It runs two courses MCA (under Autonomy) and BCA under MAKAUT. The combination of competent and vibrant faculty members, modern infrastructure and technical resources give an edge to the young technocrats.

The Department of Computer Applications started its journey in the year 2007 with MCA stream only. Next year, in 2008 BCA program was started. We are fortunate to be the choice of most of the stake holders. The Department of CA believes in excellence in education and innovation. It gives best possible placement to students. Teacher-student relationship is a matter of pride for us. Different Seminars, Workshops, Webinars, Extra-curricular and Co-curricular activities are performed throughout the year. This helps the young minds grow in diverse dimensions beyond their academics. I wish all the success to each and every student and their very bright future.

Courses Offered:

- ✓ 3 years Bachelor of Computer Application (BCA)
- ✓ 2 years Masters of Computer Application (MCA)



Department of Hospital Management

Medical establishments such as hospitals, clinics, rehabilitation centers and so on are looked upon as edifices of hope by the diseased and the ill. Like any other business, medical establishments are organized institutions. They follow complex processes and need efficient manpower to manage these processes.

There has been seen a remarkable growth in the hospital industry in India, which has lead to a great demand and popularity of the hospital management related courses. The requirement of professional administrators in the hospitals is growing briskly mostly because the nature of work in hospitals is quite different from other organizations. Hospitals are expected to deliver quality service 24 x 7 x 365.

The urgent nature of its work and the level of efficiency that is expected have increased the need of well-formulated hospital management courses. Further, various educational institutes have started offering hospital administration courses in India. What's more, a career in hospital management helps you to achieve two goals in life, namely: a good pay package and service to mankind.

Courses Offered:

- ✓ 3 years bachelor degree on Hospital Management.



Scholarship Schemes at GNIT

MTech-

Scholarship of @20% on tuition fee (Rs. 2,00,000 for 2 years, total course fee is Rs.2,22,100 for 2018-19) i.e Rs.10,000/- per semester is applicable only to the students who have studied their B.Tech in any of the following institutions:

1. JISCE
2. NIT
3. GNIT
4. DSCSDEC
5. GKCEM (JV)

- ✓ GATE qualified students are also eligible for this scholarship apart from their GATE scholarship from AICTE.
- ✓ AICTE scholarship/stipend will be provided to the GATE qualified candidates as and when received from AICTE.
- ✓ Financial assistance for publication in Scopus/Thompson & Reuters indexed journals i.e upto 50% of the publication fee.

B.Tech Lateral-

Scholarship of Rs.60,000/- @ Rs.10,000/- per semester (Tuition fee is Rs.2,34,000 and total course fee is 2,97,050 for 2018-19) is applicable only to the students who have studied their three years Diploma in Engineering in this institutions:

1. JISSL
2. JISCE
3. NIT
4. GNIT
5. DSCSDEC
6. GKCEM (JV)

MCA-

Scholarship of Rs.45,000/- at the time of admission (Admission Fee: 10000/- + Caution money : 10000/- + Tuition Fee : 25000/-) and Rs. 20000/- (Tuition fee) in 2nd semester is applicable only to the students who have studied their Undergraduate courses in any of the following institutions:

Scholarship Schemes at GNIT

1. JISCE
2. NIT
3. GNIT
4. GNIPST
5. JISU

Scholarship offered by the Government

Both the central and the state government offer scholarships to help you pursue engineering from a reputed institution in India and excel in the same field. The government of India as well as West Bengal government hosts a number of scholarship schemes to promote technical and professional education among students, like Swami Vivekananda Scholarship, Kanyashree-K2, Scholarship for minorities, oasis scholarship etc.

In our college maximum no of students applied for Swami Vivekananda Scholarship scheme. It is a giant leap for poor and meritorious students. It is formally known as the "Swami Vivekananda Merit-cum-Means Scholarship (SVMCM)". The students pursuing courses at the Under-graduate, Post-graduate, M. Phil and Doctoral Level, as well as Kanyashree recipients, will be benefited from this scheme and can apply for the same. The primary eligibility criteria to be shortlisted for the scholarship are based on academic merit. The income criteria to apply under this scheme is not more than Rs. 2,50,000/- per annum subject to fulfillment of other merit criteria. The scheme is the brainchild of the West Bengal government to aid the families that are economically backward. The scholarships are provided at different levels of higher education. There has been a thorough revamp in the scholarship structure to cater to a larger number of students.

Note: Scholarships/ Teaching assistantships are liable to be withdrawn, partially or wholly, in case of misconduct, deliberate concealment of materials/facts and/or supply of false information, and/or continued absence of more than one month except on medical grounds. Scholarships/Teaching assistantships are liable to be reduced or terminated for a period of up to one semester on account of poor academic performance or not carrying out the assigned tasks in a satisfactory manner.

Code of Conduct for Students

- **Academics:**

As a part of an autonomous body, college/ institute has its own right to evaluate the students systematically depending upon various outcomes based parameters. On the perspective of Academics, Syllabus and curriculum of different Courses and the conduction rules of Examination may be changed as per the policy of the affiliating University.

- **Tuition and Examination Fees:**

As mentioned in official website of the institution, every student has to pay the whole semester fees before the deadline published by the Institution. That tenure will be changed as per the policy of affiliating University. The Semester and Examination fees should be collected via institutional web portal or College Fees Book as per the policy of College/Institute, which shall be updated through Notice Board , Students group-mailer, Institutional website etc from time to time. However, any Institute can follow a different semester/academic year pattern with due approval from the affiliating University. Students who do not pay the fees on or before the given deadline date, will have to pay fine as may be imposed by the College authorities otherwise not be allowed for semester/yearly examinations.

- **Class Attendance:**

All students must follow the following attendance rules of GNIT.

Attendance rules

- All the students are expected to attend classes' every day without fail. However, if there are some important and genuine reasons such as family celebrations, ill-health etc., students can avail of leave after obtaining permission from the respective College/Institute Authorities.

- Daily attendance of students is marked in a register by individual teachers for every period.
- All students are expected to check their attendance from the Administration Office regularly. In case of any discrepancy; they should get it rectified by contacting the teacher concerned or the Registrar of the College within two days.
- **75% attendance is a pre-requisite for -**
 - I. Permission to write the Semester Exams.
 - II. Award of Scholarships of any kind.
 - III. Avail the Campus Placement Services.

No exemption will be granted in this regard.

- After the final attendance list is put up on the notice board at the end of semester, no request for correction of attendance will be entertained.

Related to co-curricular duties and responsibilities in the College · Students involved in Co and Extra - Curricular activities and hence missing regular classes, should contact the respective authorities (HODs, Faculty Advisors of various groups, Teacher-in-Charge, Registrar) who will recommend the case to the Principal for attendance within five working days.

N.B: Submission of application for absence with/without medical certificates does not entitle a student to earn attendance for the days of his/her absence.

- **Ragging free Campus:**

“Ragging” means the 'doing of any act which causes, or is likely to cause any physical, psychological or physiological harm of apprehension or shame or embarrassment to a student. As per the West Bengal Prohibition of Ragging in Educational Institutions Act, 2000 (W.B. Act XIII of 2000)-

- A student indulged in the act of ragging his / her juniors may be expelled from college / university.

- Students may be banned from staying in College hostel.
- Any kind of Scholarship, stipend or financial grant can be withdrawn / cancelled by the college.
- Student may be debarred from appearing at future examinations of college.

Student may be debarred from taking admission to any other educational institute in the state or even in the entire country.

- **General Misconduct**

If any student is found to misbehaving with the faculty or staff, security guard, hostel Warden or any other authority inside the hostel premises or college premises, which will destroy the image of the institution, is liable for the punishment.

- Any kind of Cheating, bribing, gambling, copying in exams, giving false declarations, spreading rumours / unfounded accusations activities are also liable for punishment.
- Any kind of wild noisy and disturbing behaviour/ celebrations in the campus is strictly prohibited. Nobody should sit on the corridor walls/railings.
- Smoking, Consumption or possession of alcohol in the campus (including the college hostel) is strictly prohibited.

- **Misbehaviour and Assaultation**

Assault generally refers to any wilful attempt or threat to inflict injury or other physical contact upon another person or the actual unwanted physical contact with another person, all without the consent of the alleged victim. When a

student is found responsible of violating the Assault policy, the recommended sanction is a minimum of one semester suspension.

- **Uniform Code**

Every student is required to be in College/Institute's Uniform on all working days or simple and modest formal dress with reasonably sensible design of clothing. (if no uniform is applicable for the College/Institute). Every student should be very well groomed according to the check list given to them.

- **Rules of Digital media Access:**

- Do not use College-provided computing resources to invade or alter private records, data, or communication belonging to individuals, to the Institute/College, or to others.
- Unauthorized copying of software is illegal. You may not use or store pirated software on any College computing system.
- Never use any College computer account other than your own and any kind of unauthorized web recourses.

- **Discipline at the time of Campus Drive:**

Students who indulge in in-disciplinary activities in the campus or during the campus recruitment programme are not eligible to attend in any campus recruitment process. Misbehavior with any of the college T&P authorities or recruiters those who are specifically engaged with Training and Placement Cell, is liable for disqualifying from campus recruitment programme.

GNIT Policy for Payment of Fees

- **Fees Structure for several courses:**

Semester fees for courses must be paid before the commencement of semester, i.e., in case of odd semester it should be paid in the month of June and for Even semester, the payment must be done in the month of December.

The semester fees for different courses are given below.

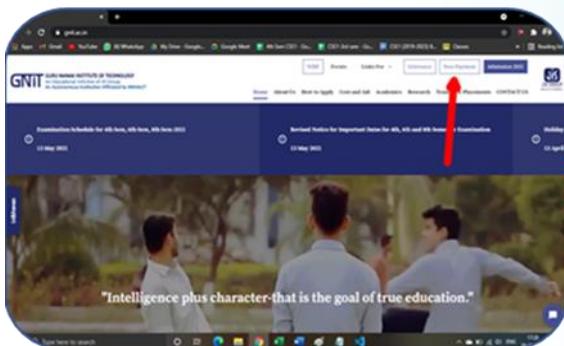
<i>Course Name</i>	<i>Course Fees</i>
<i>B.Tech</i>	4,08,000/-
<i>BBA (Bachelor of Business Administration) in Hospital Management</i>	2,40,150/-
<i>BCA (Bachelor of Computer Application)</i>	2,40,150/-
<i>B.SC in Data Science</i>	2,40,150/-
<i>B.SC in Cyber Security</i>	2,40,150/-
<i>MCA (Master of Computer Application)</i>	2,06,600/-
<i>M.Tech in Computer Science &Engineering (CSE)</i>	2,22,600/-
<i>M.Tech in MCNT (Mobile Communication and Network Technology)</i>	2,22,600/-
<i>Diploma (EE &ETCE) JEXPO Counseling</i>	99,000/-

- **Policy on fine waive due to late submission of Semester fees:**

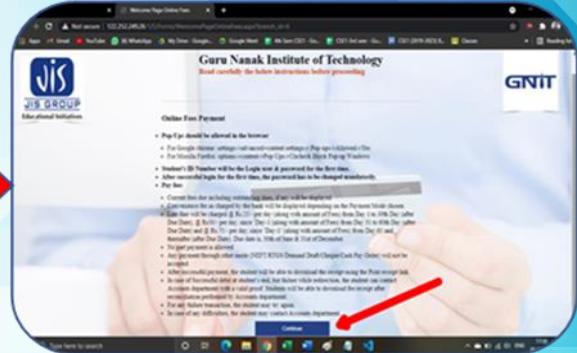
Regarding Semester fees payment, any kind of late fine is only considered for waiving as per the Fees payment policy of Institution if the student can show a proper justification with a valid documentary proof. Students may request for his/her fine wave via email to their respective departmental mentors/HOD by providing the proper reason with parent's consent. Please note, all such requests must be made with proper and sufficient documentary evidence in support of that request. Otherwise, it will not be entertained.

Fees payment Procedure

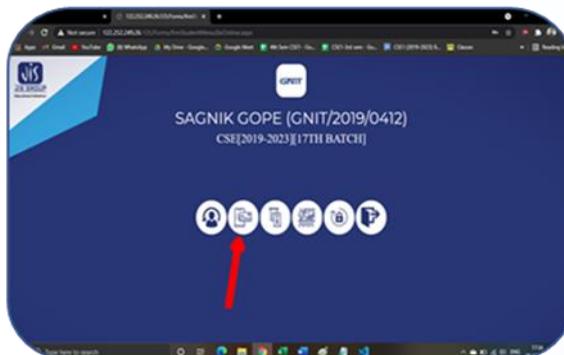
Step1: Open gnit.ac.in
Click on the “Fees Payment” option



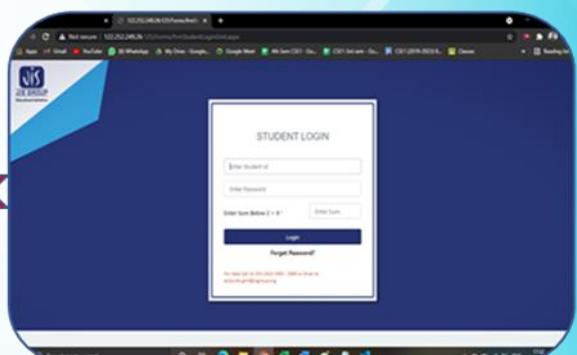
Step2: Scroll Down and click “Continue”



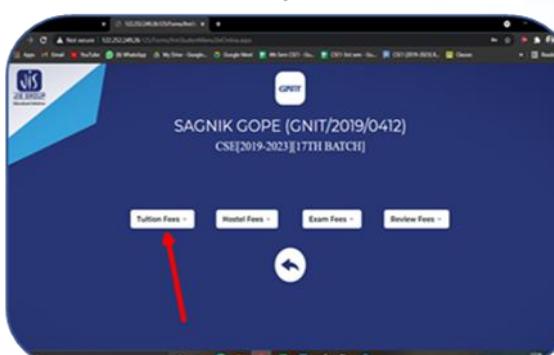
Step3: Click on the Second option (Online Pay)



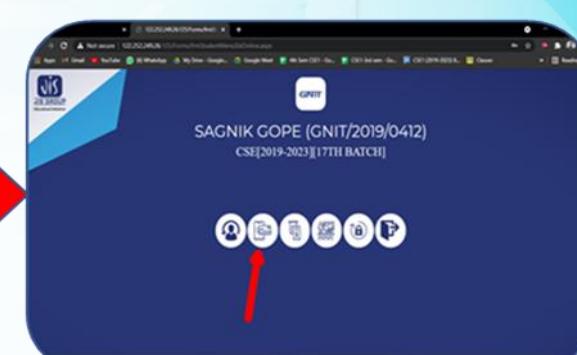
Step4: Enter your ID (GNIT/****/****) & Password



Step5: Click on “Tuition Fees”



Step6: Click on “Advance Fees”. Edit the “Enter Semester for Advance Fees”, Write the Fees Amount in “Enter amount for Advance Fees:” & then click on submit button. Then you will be redirected to the net banking page...



Teaching, Learning Assessment

Students have to abide by all rules and regulations framed by the affiliating University, regarding academics, syllabus and curriculum, which may change from time to time as per the policy of the affiliating University.

The Institute also reserves the right to assess the students through their own evaluation system and decide on the facilities to be provided to each student.

Promotion Policy

The students are eligible for promotion based on the assessment of attendance record, academic progress (credits obtained) both in the University and internal examinations, code of conduct observed by the student with the fellow students, juniors, administrative officers, faculty members and last but not the least the Head of the Institution. Internal Evaluation are done by two phase Unit Test-I and Unit Test-II. The division of 100 marks for theory examination is -

✓ Unit Test-I	15 Marks
✓ Unit Test-II	20 Marks
✓ Assignment	05 Marks
✓ Attendance	05 Marks
✓ Semester Examination	70 Marks

The division of 100 marks for practical examination is

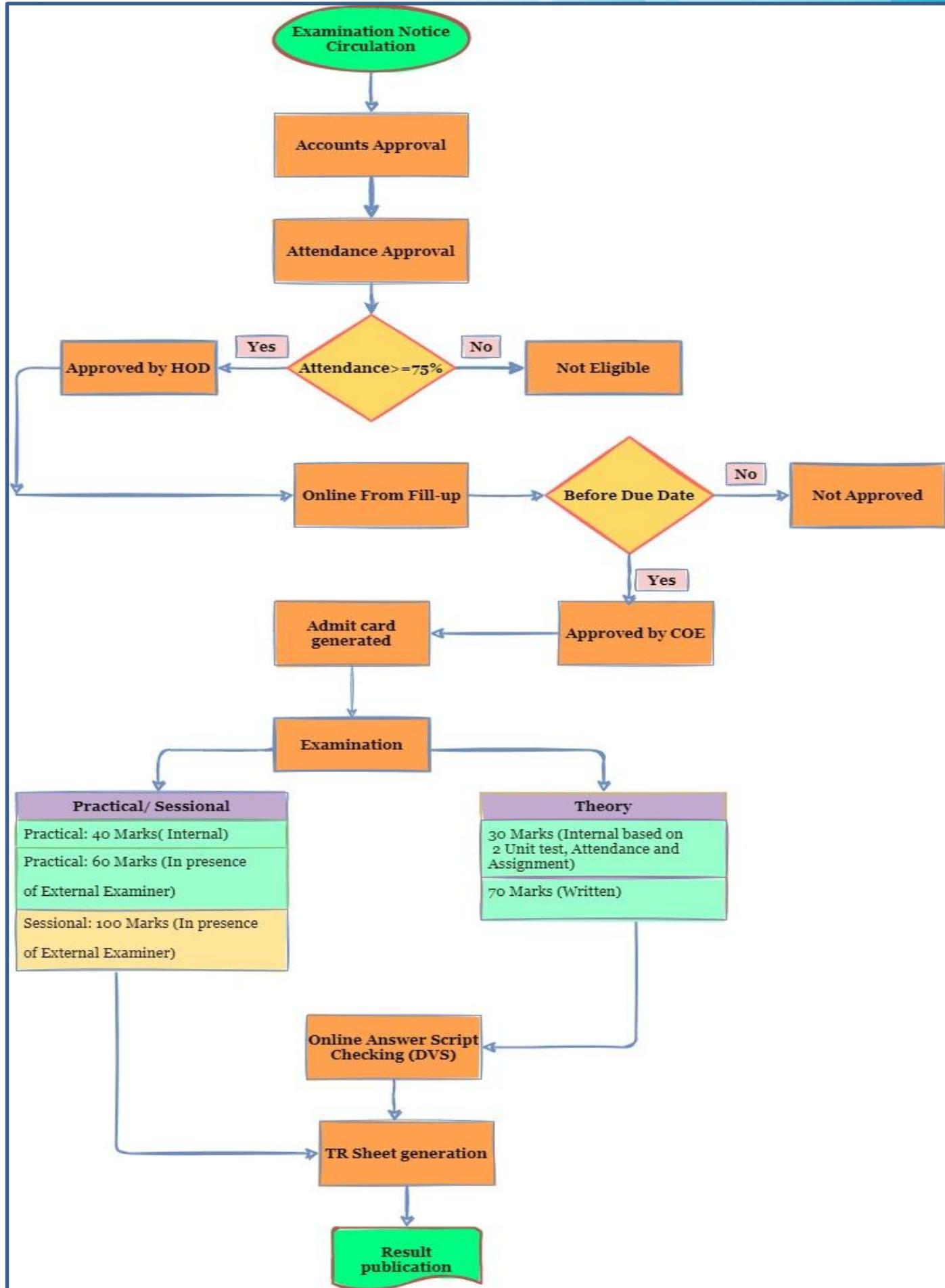
✓ Internal Evaluation	40 Marks
✓ External Evaluation	60 Marks

Examination System

In the Offline mode the examination system is conducted as per guideline in the form of Unit Test, Semester Examination, Laboratory Examination and Viva/Project.

In the Online Mode the unit test examinations and semester examinations are conducted using the virtual platforms.

- Proctor based tests are conducted. Students are provided with individual login ID and password, which they use to login to examination portal and download the question paper.
- The entire examination is conducted under the supervision and surveillance of the Exam Cell in collaboration with MindLogix.
- Any violations of the rules are monitored, recorded and the student is warned if any vulnerability is found.
- Within the stipulated time, the students are to submit the scanned copy of the answer sheets.
- Contrarily, Bloom's Taxonomy Action verbs are used to frame Questions for the Open Book Examination (OBE) system.
- In Laboratory exams, the routine with time slots is provided to students and the departments conduct the exams through LMS Portal, thus their lab files and recorded videos are kept as a proof of the fair conduct of the exam.
- Apart from that various mock tests, technical and aptitude, are conducted through online MyPerfectice platform to make the students industry ready.



Project Based Learning

Our curriculum highlights the importance of Project-Based Learning – encouraging students to acquire a deeper comprehension through active exploration of real-world challenges and problems.

In this student-centered pedagogy and in this dynamic class approach, our students gain knowledge and skills by working for an extended period to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.

We encourage our students to learn by applying knowledge and skills through an engaging experience, by presenting opportunities for deeper learning in-context and for the development of important skills tied to college and career readiness.

Blended Learning

At GNIT, we integrate traditional face-to-face class with online activities in a planned, pedagogically valuable manner. We strive to provide with successful blended learning as technology and teaching inform each other – the material becomes dynamic as it reaches students of varying learning styles.

Our hybrid teaching-learning process can reach and engage students in a truly customizable way. In this scenario, online education is a game-changer, not just a supplement for the status quo, but what this theoretical model looks like in practice – keeping in sync with the paradigm shift from traditional teaching-learning to a virtual one.

Our practice of blended learning reinforces student-centered learning, allowing them to master content in an individual way and in their own unique pace.

B.Tech with Honors Facility

For Honors additional 20 Credit Point is to be earned (1 st Sem to 8 th Sem) through MOOCs courses. All the Certificates received by the students across all semester for MOOCs Courses from approved organization is to be submitted to CoE office prior to 8th Semester Examination.

Collaboration with Coursera:

Coursera Inc. is an American massive open online course provider founded in 2012 by Stanford University computer science professors Andrew Ng and Daphne Koller. Coursera works with universities and other organizations to offer online courses, certifications, and degrees in a variety of subjects. More than 150 universities offered upwards of 4,000 courses through Coursera, which features over two dozen degree programs at prices that are lower than many in-person school offerings. From Coursera our students can attend various types of courses in multiple numbers of fields as per their choice from the world's best instructors and universities. Courses include recorded auto-graded and peer-reviewed assignments, video lectures, and community discussion forums. When you complete a course, you'll be eligible to receive a shareable electronic Course Certificate. Students of GNIT are able to participate in Coursera programme which is totally free of cost. In each semester every student must have to clear minimum one examination after completing that course under courser platform.

Some list of Websites which offers online certification courses:

1. Swayam- <https://swayam.gov.in/>
2. NPTEL- <https://onlinecourses.nptel.ac.in/>
3. Coursera- <https://www.coursera.org/>
4. Udemy - <https://www.udemy.com/>

The distribution of the credit with respect to weeks is as follows:

- ✓ 4 to 7 weeks: 2 Credits
- ✓ 8 to 11 weeks: 3 Credits
- ✓ 12 to 15 weeks: 4 Credits
- ✓ 16 or more than that: 6 Credits

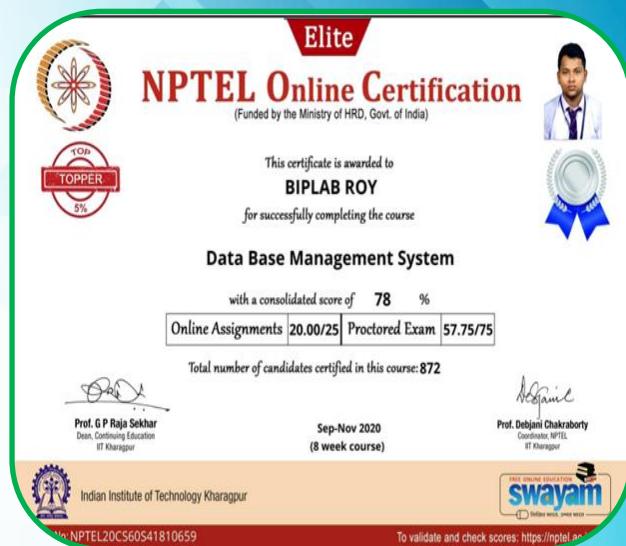
NPTEL Certification

NPTEL MOOC Courses are also doing by a huge no. of students and here also, it should be highlighted that thousands of our students are pursuing NPTEL courses and passing with flying color with Elite Gold and Elite Silver, Topper in India and give some names of the students. Also it has to be mentioned that almost 90% of our faculty members are NPTEL qualified.

Some glimpse of NPTEL certification is given below



Bikramjit Das
Topper and Obtained Elite+Siver Certificate NPTEL "Problem Solving through Programming in C" during Odd Semester, 2020-21



Biplab Roy
Topper and Obtained Elite+Siver Certificate NPTEL "Data Base Management System" during Odd Semester, 2020-21 and Elite+Siver Certificate NPTEL "Programming in JAVA"



Saptarshi Dey, B. Tech. 1st year.
ELITE in NPTEL course "Programming in C++"



Ankita Bose, B. Tech. 1st year.
ELITE in NPTEL course "Programming in C++"

- Ahini Roy has achieved “gold” category in NPTEL course named “The Joy of Computing using Python” where as Uddipan Chowdhury, Subhra Sarkar, Swarnali Banerjee ,Sayan Bhattacharjee, Sayan Majumder have got silver and also Piyasha Ghosh, Anubhab Sen,Debashruti Das, Sayani Sengupta, Sayani Dutta, Nilendu Banerjee, Sayan Sarkar, Roni Mondal, Moumita Basak, Anurati Kar, Spandan Ghosh and so many students have achieved “Elite category on the same course.
- Debashruti Das and Sriparna Ghosh got “Silver” rank in respective NPTEL courses named “Enhancing Soft Skills and Personality” and “Programming in Java”.
- Santanu Das and Kinkini Adhikari got “Elite category” in the course “Advances in UHV Transmission and Distribution” and “Control Systems” respectively under the course of NPTEL.
- Alangkrita Chakraborty, Archita Dey and Lipika Mukherjee have successfully completed their NPTEL course named “Control Engineering” under the category of “Elite”. Among them Lipika Mukherjee achieved Elite+Silver rank.
- Gourab Bag has achieved “Elite” rank under both NPTEL course “Electric Vehicles-part 1” and “Electrical Machine -1”. In this “Electric Vehicles-part 1” category Biman Chandra got Elite+Silver rank.
- Baban Kumar, Debjit Sarkar got “Elite+Silver” rank in course “Electrical Machine-II” whereas Anirban Chandra achived “Elite” on the same. Shuvam Patra and Shubhro Kundu also achived “Elite+Silver” in course “Network Analysis”.
- Sourav Pal and Ravikant Bhagat have achieved “Elite+Gold” and “Elite+Silver” rank respectively for course “Python For Data Science” under NPTEL where as Rohan Sengupta and Poushali Gope have got “Elite” rank for course “Python Power system engineering”.

- Pallabi Banerjee and Monishankar Ghosh have achieved "Elite" and "Elite+Gold" category in course "Non conventional energy resources" and "Programming, Data Structures And Algorithms Using Python" respectively.
- Shubham Banerjee has achived "Elite" rank in "A brief introduction to micro sensors", Sayan Majumder, Partha Pratim Roy and Disari Chattopadhyay also have successfully completed the course "Data Structures and Algorithm using Python" with same rank.
- Anup Jha and Joy Das have achived "Elite + Silver" rank in course "Analog Electronics". Here Joy Das has also completed the course "Practical Application of Op-Amp" with same rank.
- Sneha Baidya has achived "Silver" rank in "German I" and "Elite" category in "Introduction to IoT".
- Gulshan kumar, Sayantani Das got "Elite" in "C Programming" and "Data Base Management System" respectively where as Kushal Ghosh has achived "Elite + Silver" rank under "Programming in C++".
- Sayantani Das got "Gold" where as Satish Singh and Partha Pratim Roy have completed their NPTEL course named "Programming in Java" with "Silver" rank.
- Romik Banerjee got "Gold" where as Sayan Bhowmick has achieved "Elite" rank in the course "Robotics".
- Mariya Mukherjee of FT department got Elite rank in NPTEL
- Anindya Dhar of FT department got Elite in NPTEL
- Saurjaynee Biswas Dhar of FT department got Elite in NPTEL
- Rupsa Sengupta Dhar of FT department got Elite with Silver & Top 5% score in India

Many more ...

Facility for Higher Study

GNIT provides a good platform for pursuing higher studies. Special guidance is provided for the students for appearing competitive examination. Students are facilitated by providing recommendation for pursuing higher studies in the foreign universities. Each year a good number of students are able to pass national and international level examination. We also provide students exchange program with AIT Bangkok, and some universities/ Institute of Russia and France.



Snehasri Nag
MS from Portland State
University



Mr. SUBHODEEP SAHOO
Pursuing PHD
UC DAVIS



Ms. Sahana Deb
MS in Applied Computer
Science
Columbus State University



Sayantani Saha
Pursuing MS
Univ. Of Southern California



Arijit Chatterjee
M.Tech (Power systems)
Indian Institute Technology
University



Ms. Sahana Deb
MS in Applied Computer
Science

- Mr. Debjit Ghosh, MS from University of Hohenheim, Germany
- Mr. Joyjit Saha, MS from Oklahoma State University, Stillwater, Oklahoma, United States
- Dr. Indira Dey Paul, M.Tech., Ph.D., IIT Kharagpur
- Ms. Sanjana Chakraborti, M.Tech. , NIFTEM (under MoFPI, Govt. of India)
- Ms. Rupsa Roychowdhury, M.Tech., Tezpur University
- Mr. Aurik Bairagi, M.Tech., Jadavpur University
- Md. Ashar Alam, M.Tech. Jamia Millia University, New Delhi
- Sheikh Tanveer Hossain, Master of Engineering (Electrical Engineering) Texas A&M University, Kingsville
- Arijit Chatterjee, M.Tech (Power systems) Indian Institute Technology (Indian School Mines), Dhanbad
- Chandrika Dey, MBA NIT, Rourkrla.
- Anisha Naskar, M.Tech. in Illumination Engineering Jadavpur University
- Abhirup Sinha, M. Tech in Electric Power University of South Australia
- Himadri Shekhar Mondal, M.E(Machines) Jadavpur University
- Sayan Saha, M. Tech (Power Electronics, Machines and Drives) IEST, Shibpur
- Prashant Shaw, M. Tech (Power Electronics, Machines and Drives) IEST, Shibpur
- Dr. Biswarup Mukherjee: Post Doctorate from Harvard Medical School
- Smarajit Chakraborty: Engineering Technology & Management from Portland State University
- Oindrila Ghatak, Pursuing MS From Edinburgh University
- Abhratanu Surai University of Paderborn, Germany,MS in Computer Science
- Vijaeta Shailja University of Texas, Arlington, USA, MS in MIS
- Sweta Singh Chemnitz University of Technology, Germany, MS in MIS
- Ankita Das State University of Newyork, USA, MS in Computer Science
- Ipsita Singha Roy Indus Business Academy, Bangalore,MBA
- Sumit Kumar Singh Indian Institute of Space Science and Technology, Thiruvananthapuram
- Shubhojit Ghuha Thakurata MTech, Kalyani University

Many more ...

Beyond Curriculum Training

GNIT offers new courses apart from the curriculum frequently to cope-up with new trends worldwide in the field of engineering educational. Apart from course work, the managerial skills, communication skills, leadership ability of the students are improved by conducting various **Personality Development Programme, Technical Skill Development and softskill development program.**

Personality Development Programme:

We organize **Personality Development Programme** classes for the students for improving their self-confidence, dynamism, communication skills, analytic approach and positive attitude etc. This will help them to prepare and face the challenges of Corporate World. The PDP classes are conducted by experts.



Technical Skill Development:

GNIT organizes Technical Skill Development program for all students in each semester. The main objective is to make students ready for the industry by offering training on the advanced technology, so that they can improve their technical skill and get better placement opportunities.

Soft Skill Development

Soft Skills training is arranged for the students of each year to enhance their personalities, communication & to develop confidence to take on international competition. GNIT has tied up with various organizations to develop soft skills among.



Industry Visit

Industrial visit has its own importance in a career of a student who is pursuing a professional degree. It is considered as a part of college curriculum and objectives of industrial visit is to provide students an insight regarding internal working of companies. We know, theoretical knowledge is not enough for making a good professional career. With an aim to go beyond academics, industrial visit provides student a practical perspective on the world of work.

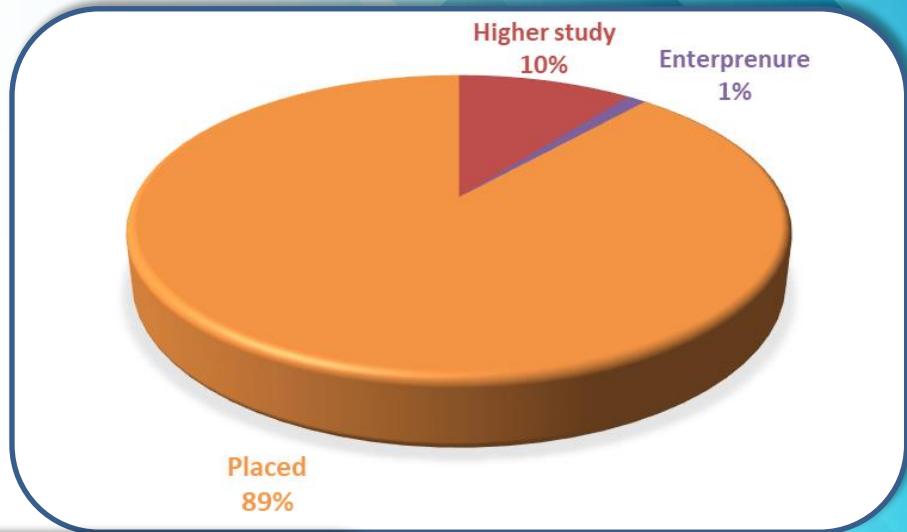
Industrial visits are arranged by different department of GNIT for the students with an objective of providing them functional opportunity in different sectors which also helps to combine theoretical knowledge with industrial activity. Industrial realities are opened to the students through industrial visits. Our college can provide all kind of assistance like transport, Financial assistance, students security during the visit when a department takes initiatives to organize an industry visit into different reputed companies like Amul, Frooti, Globesyn pvt ltd, Webskitters pvt ltd, Wipro, Ardent pvt ltd etc. In these companies, some important interactive sessions were arranged by their senior expertise group to describe the realistic formulation process about their product and services practically. Professional helps our students to understand different components of the products/services that they provide to their clients- front end, back end, app development, food processing, circuitry designing and much more. In single term Industry visit is a wonderful learning opportunity for all the students through which they become familiar with real life working process of any industry.



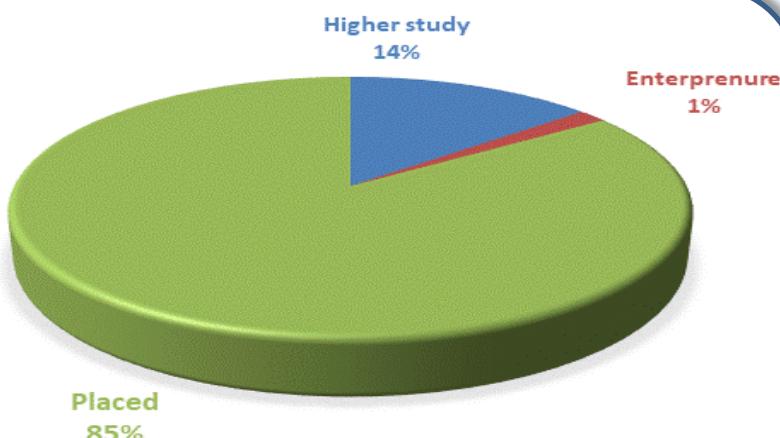
Placement Details

Around 130 companies took part in placement of the students in each academic year. Some of the major companies which hired our students are. The highest salary offered is Rs. 10.00 lacs Per annum by Thnik & learn (Byju's). The average salary is. Rs. 3.5 lacs Per annum.

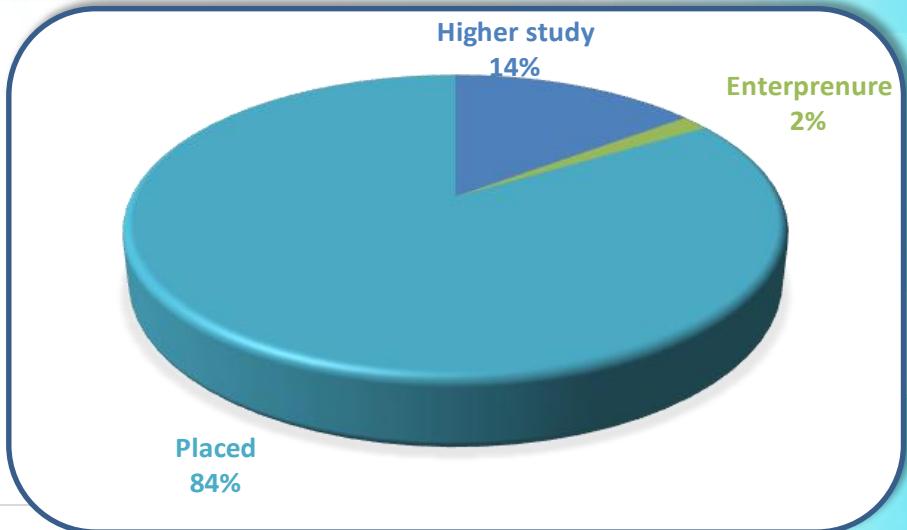
**Placement record for
2020-21 Academic year**



**Placement record for
2019-20 Academic year**



**Placement record for
2018-19 Academic year**



Student Publication

Cultivating top-quality scientific research is an important requirement for producing any fruitful innovation. On that occasion, Institutional R&D Cell is responsible for monitoring overall performances of student's research engagements in different research areas. From Student's perspective, **250+ National/International Conference papers, 100+Peer reviewed reputed journals** including some high quality **SCI/SCOPUS/Web of Science/Thomson Reuters** indexing has already published by various research publishers across the globe and lot of publications are progressing in faculty-student collaborative effort. Students are also published their research papers in different **UGC and Google scholar** related peer reviewed journal. They also participated as a speaker in various International Conference and achieve various kinds of awards.

To increase the no of student publication, so many national and international conferences, hands on workshops and seminars are being organized in regular basis. **ICORE, FEMAS, NSSAMCS, ISACS**, are some highly responded International conferences where students are participated as a paper presenter.



Patent & IPR

GNIT offers an international platform by providing its own international journal for publishing articles on original research initiatives, interpretative reviews and overviews on new developments in the realm of engineering, technology and also basic science fields. It also organizes different sponsored international conferences sponsored by IEEE, AICTE etc and presents a special platform by offering Special Issues with ISBN number, published periodically; these are the rich sources of information with contributions from noted academics and research scholars, in the upcoming areas.

Faculty members of the institute works with world are leading publishers of scholarly journals and books. All the journals are indexed by SCOPUS/Clarivate Analytics. Group encourages publishing the work in a good reputed SCI journals where students are the primary authors. Faculty members of JIS group are the regular reviewer of Elsevier, IEEE Transactions and having Collaboration with Taylor & Francis group USA which has facilitated a wide international readership for the journal along with high-quality logistic support and has added a professional finesse to the article they publish.

Writing a patent application requires a subject matter expert of GNIT made it possible by having a long journey towards it. GNIT with its own initiative has published hundreds of patents in last couple of years where students are the inventors. Few patents are granted and commercialized. The procedure for filing Patent application and its processing up to grant/commercialization is fully governed by an Expert who has outstanding excellence in this field.

- Soumyadipta Basuof IT 3rd year published a patent in 2021 titled "Camfecting detection for IP surveillance Camera, Web cameras from harmful adult websites".
- Oindrila Ghatak 4th year ECE student published a patent " Green Power for Rural area development" in 2020.
- Likewise, Subharshi Roy of EE 4th year published a patent on "Design of Exo-arm for physically disabled persons" in 2020.
- Ms. Saurjaynee Biswas and Ms. Nibedita Chowdhury, students of final year FT, jointly published a patent titled "A potential source of polyphenols and dietary fibre in food fortification" in the year 2019.
- Shilpita Hazra, Sampreet Dey, Sakya Mridha students of AEIE final year , with a joint effort published a patent titled "Ultra-Smart low cost Automatic Irrigation & Air Pollution Control System For Rural And Industrial Area" in the year 2020.

All patents are yet to receive for Granting from IPO, GoI very soon.



Innovative Project Work

The Institution Innovation Council and the Entrepreneurship Development Cell of GNIT fostered several multidisciplinary projects which enabled the students to accomplish accolades nationally. Students come up with innovative projects and participate in **MHRD's Smart India Hackathon**, **ACM - Inter Collegiate Programming Contest**, **S4DS Hackathon**, **AICTE Chakra Vishwakarma Award** and several other platforms provided by the Industry. Several projects were funded by **JIS Idea-O-Meter** and students are working in different domains from **Antennas, Radio, Semiconductors, Artificial Intelligence, Machine Learning etc.**



Students Chapter

GNIT has different students' chapters to promote the research and innovations. Some of them are-

SESI Student Chapter

Recently SESI had inaugurated the first Institutional & student chapter in West Bengal. The GNIT Kolkata is the first institution in West Bengal where this chapter is inaugurated. GNIT had taken a lead by opening this chapter and start working on the latest sunrise industry. The student would have exposure to this sunrise industry. While they will participate in various activities of lecture, seminar, conference, and exhibition organizes, supported by SESI.

Name of the Faculty Coordinator: Dr. Barnali Kundu
barnali.kundu@gnit.ac.in)



IE(I) Chapter

The Institution of Engineers (India) IE(I) head quartered in Kolkata, is a professional institution established based on a recommendation by the Sir Thomas Hulland, president of the Indian Industrial Commission during 1916-1918 to the Government of India. The IE(I) aims to promote the needs of the student community, acts as a platform to connect with global engineers and actively encourages R&D programs through various promotional aids. In addition, the IE(I) supports many types of activities such as Lectures, Seminars, Symposia, Workshops and other educational programs. Guru Nanak Institute of Technology (GNIT) has been nurturing academic brilliance in young minds by encouraging and promoting student chapters of various technical societies which has led to the formation of the GNIT-IE(I) Students' Chapter. The Institution of Engineers India (IEI) Students' Chapter at Guru Nanak Institute of Technology (GNIT), Kolkata is recognized as an authorized students' chapter approved by The Institutions of Engineers (India), Kolkata.

ISTE Chapter

The Indian Society for Technical Education (ISTE) is the leading National Professional non-profit making Society for the Technical Education System in our country with the motto of Career Development of Teachers and Personality Development of Students and overall development of our Technical Education System. At present, ISTE has a very large and an effective membership base throughout the country. It is a Professional Society giving many awards to Institutions, Teachers and Students for innovation and excellence in various areas of Engineering and Technology. Guru Nanak Institute of Technology (GNIT), Kolkata owes an Educational Institution Membership of ISTE for students. Various events like Inter departmental competitions, Quiz competitions, Guest Lectures, Workshops, Seminars etc. are organized under ISTE Student Chapter every year at GNIT.

IEEE Student Chapter

The IEEE Student Branch of Gurunanak Institute of Technology provides opportunities to meet and learn from fellow IEEE Student and Graduate Student Members and engage with professional IEEE members locally. IEEE Student Branch GNIT is one of the most positive elements of student's academic career, offering programs, activities, and professional networking opportunities that build critical skills outside of the classroom. IEEE Student Branch GNIT organized conferences, workshop etc at national as well as international level.

Name of the Faculty Coordinator: Dr. Sunipa Roy (sunipa.roy@gnit.ac.in)



National Cyber Security Cell

GNIT signed MOU with National Cyber Security Cell in the year 2019. This cell organizes workshops, webinars and seminars. Conducts short term training program phases on Cyber Security and Ethical Hacking. Spread awareness Boot Camp on Cyber Security to ensure a safe Cyber space in this digital world.

Name of the Faculty Coordinator:

Tridib Chakraborty (tridib.chakraborty@gnit.ac.in)

Name of the Student Coordinator:

Soumyadipta Basu, Information Technology, 3rd Year.



Mentorship at GNIT

During times of transition – such as making the move from high school to college, or from college to first career - having adequate support that one can rely on is essential.

Our college has a unique mentoring relationship – one which is a very personal one, which is often important to the mentee. The mentors support students to improve their learning and leadership skills; and motivate them towards their future career development.

The small Mentor-Mentee ratio helps the Mentors to actively listen to individual student's scholastic and co-scholastic aspects, and teach valuable academic skills, as well as lifelong and professional tools.

Mentoring is more than just sharing knowledge -they help mentees identify their own goals and stay focused; and offer empowerment and encouragement to guide them to achieve their goals, or solve any challenges along the way.

Mentors act as a resource to the mentee whenever a need may arise and they leave an indelible impact on the life of the student in many ways.



Library Facilities

The Library is an information resource center providing books, magazines, periodicals, and newspapers. Computers offer Internet access to online databases of full text periodicals and electronic books. The Library offers study rooms, course reserve materials, and photocopy machines.

Reference assistance is available for group and individualized instruction. Apart from faculty, staff, administration and students, Industrial establishments / corporate houses can also avail the services of Library on taking Institutional / Corporate membership of the Library. Library consultation facilities are also available to faculty and students of outside Institutes / Organization on request. The Library, besides having a huge collection of books on engineering, science and humanities offers library services through its various Divisions.

Hours of Operation

Other than the holidays and Sundays, library remains open on

Monday to Friday: 08.00 a.m. to 8:00 p.m.

Saturday: 08.00 a.m. to 5.00 p.m.



Library Resources (Printed Document)

Text Books : **48632**

Reference Books: **5199**

Hard copy Journal & Magazine : **31**

News paper : **5(4 Daily and 1 weekly)**

Previous year question paper

Faculty Publication

Student Publication

Student Project Paper

E-Resources

E-books : **1,15,000**

E-Journal :**22509**

CD/DVD : **3293**

E-magazine: **5000+ E-Magazine and premium articles**

British Council Library

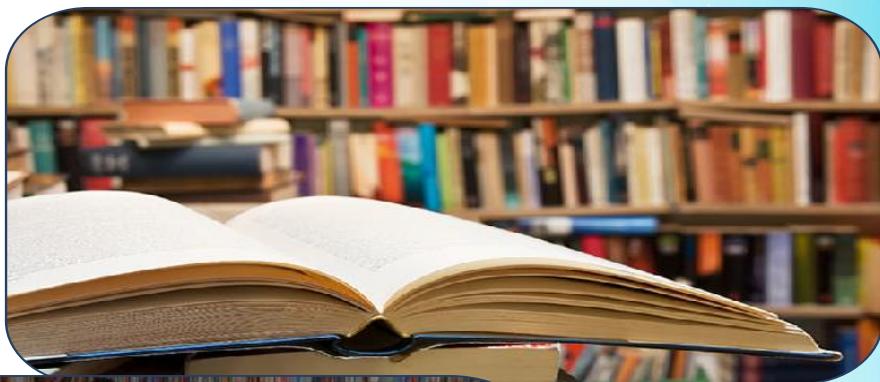
- ✓ Best current collection of British books and journals
- ✓ Training materials
- ✓ Professional training DVDs
- ✓ Management Workshops and Video- Screenings
- ✓ Business English skills development programmers
- ✓ Exclusive series of workshops
- ✓ Fully downloadable online resources (90,000 e-books, 7,000 e-journals) with personalized access

- ✓ Management Information Support Services
- ✓ Film screenings, musical performances, arts exhibitions and book launches
- ✓ 20 Books & 10 periodicals for three weeks
- ✓ Two management training video for three weeks

Single login to 115000 full text E-books, 7000 full text e-journals, Literature Online(350,000 full-text works of English and American literature), Zinio (collection of international digital magazines) and IndieFlix (3000 award winning independent movies and short feature)

National Digital Library (Govt. of India)

- Repository hosts contents for multiple subject domains like Technology, Science, Humanities, Agriculture and Others
- Repository integrates contents from different Indian Institutional repositories



Collaborations

Academic Collaborations at National & International Level

The institution has active collaboration with MHRD and AICTE as GNIT was the **Nodal centre of MHRD Smart India Hackathon (2017-2019)**, **Nodal Centre ACM ICPC (2016-2020)**, **QS- I Gauge, MHRD-AICTE Stanford University Project**, **MHRD Institution Innovation Council and Nodal Office – MHRD NPTEL & Swayam Courses**. For Foreign Exchange Programme GNIT collaborated with AIT, Bangkok and Educational tours were arranged in collaboration with Russian and French agencies. On a regular basis we collaborate with Industry Bodies, Corporate Organizations and educational bodies to engage our students in academic, entrepreneurial and extra academic engagements.

Research Collaboration:

The outstanding research work done in the institute's faculty members duly rewarded with several national and international recognition and awards. Faculty members are also recipients of the most prestigious national research fellowship and also advisory board members and regular reviewer of many reputed journals. Institute has the collaboration with Jadavpur University, CIDAC (Kolkata) and many more for faculty, UG & PG students.

The institute has partnership with different universities across the world with which student/faculty exchange programmes and active collaborations for research are strongly encouraged.

Industry Collaboration:

GNIT ties-up with many industries to enhance the industry institute collaboration and bridge the academic gap. Our Institute has been successfully signed multiple number of MoU s with reputed industries and academia among various field. Among them Globesyn Pvt. Ltd, MSME, Student exchange program & Research collaboration with Jadavpur University, CIDAC, Trident Tech-Lab, SMC (Smart Management Consultancy), Dept of food technology, Bundelkhand University, Jhansi, VABL(Vedanta Agro bio Limited.), India Internet Foundation, Electromech & Transtech pvt. Ltd., Ardent Pvt. Ltd, Ogmatech Lab etc. All these industries provide training to our students in collaboration with our institution.

Internship Facilities

GNIT provides opportunities to the students to carry out internships. Students get themselves registered for Online Internship mostly via **Internshala** – an internship partner of AICTE. The monthly remuneration offered to them ranges from Rs 3000/- to **Rs 30,000/-**. Even in the recent months also, many students got offer letters from different industries like **E-Cell IIT Bombay**, **Tryst IIT Delhi**, **BITSMUN Pilani-BITS Pilani**, **United Nations Volunteer**, **International Model United Nations** etc. for Online Internship. It gives the students an exclusive experience of Work from Home culture and on job experience. They can earn money sitting at home during study.

Internship done by students during the current academic year

- Sourav Paul (Electronics and Communication Engineering) and Rima Bhunia (Agriculture & Food Engineering) has successfully completed his internship from United Nations Volunteer
- Kuntal Mitra,Diganta Das and Bishal Kumar shaw (Department of Computer Science and Engineering) have successfully completed their 6 month (From January,2021 to July,2021) internship program from Persistent Systems Ltd. in 2021.
- Mouli Roy has successfully done 2 consecutive internship program from E-Cell IIT Madras and also from E-CELL IIT Roorkee
- Vaishnavi Gupta(Information Technology) and Rajdeep Dutta(Electrical Engineering) have successfully completed their internship program from E-Cell, IIT Bombay,2020-2021.
- Rohit Dubey(Electronics and Communication Engineering),Sayandeep Halder,Dipanjan Mondal,Arunanshu Shee(Food Technology) and Subhrajyoti Bhowmick have successfully done their internship program from Tryst, IIT Delhi

- Rohit Dubey(Electronics and Communication)has completed internship from BITS Pilani
- Ajit Kumar(Electrical Engineering) and Debapriya Mallick(BBA) has successfully done their internship from FMS Delhi and Atmas Softwares respectively.
- Debanjan Chandra has completed 2 month (July,2020-August,2020) internship program from Air India Engineering Services Limited, Eastern Region, Kolkata - 700052. in the year of 2020 .
- Shubha Deb has done 4 month(July-October,2020) internship successfully from ANDROCID in 2020
- Madhusudan Bar has completed 8 month (August-2020 to March-2021) internship program from Ultratech in the year of 2020.
- Subhajit Dalal and Debdipta Bhunia have done 2 month(May-June,2019) internship program successfully from Department of Atomic energy Variable Energy Cyclotron Centre, Kolkata in 2019
- Arpan Mandal has completed 3 month (August,2020- October,2020) internship program from BigShyft in 2020 .
- Md. Faisal Alam has done 3 month (August,2020- October,2020) internship successfully from Innovacia Technologies in 2020
- Agnibas Chattopadhyay (Department of Computer Science and Engineering) has completed 7 days (7th September-2020 to 14th September -2021) internship program from Ivory Events in 2020.
- Atasi Bhowmik and Agnibas Chattopadhyay (Department of Computer Science and Engineering)have done respectively 3 month (August-October,2020) and 2 months (September-October,2020) internship program successfully from International MUN in 2020
- Aiswaria Chatterjee (Department of Computer Science and Engineering) has attended and successfully completed 9 days internship program (From 20th August,2020 to 29th August,2020) from Techno trandes.

- Jadab Banerjee (Department of Computer Science and Engineering) has completed 3 month internship (From October, 2020 to December,2020) from Geoalgo Technologies Pvt. Ltd.
- Akash Gupta (Department of Computer Science and Engineering) has completed 3 month (August-2020 to October-2020) internship program from AMPHIX Pvt Ltd in the year of 2020.
- Monami Roy Choudhury, Sinjana Saha, Sandipan Sau and Mousumi Dass have done their 4 month (From February,2021 to May,2021) internship program successfully from Paapri Business Technology in 2021.
- Tirthankar Datta has successfully completed his 2 month (From August-2020 to October-2020) internship from Brdgespan Consultants in the year of 2020.
- Subhabrata Chakraborty has successfully finished 2 consecutive internship-one is from InspectHOA (From September 2020 to October 2020) and other is from Cloudsherpain the year of 2020-21.
- Supriti Manna (FT) has completed her internship successfully from Sana Skillpromise Education Private Limited
- Sourav Samanta (FT) has successfully done his internship from JK Chemicals.
- Ms. Riya Dasgupta & Ms. Pritika Prasad (FT) have successfully attended as an Intern at Don-Limon
- Ms. Riya Dasgupta & Ms. Pritika Prasad (FT) have successfully attended as an Intern at Don-Limon
- Madhurima Kundu (FT) has successfully done her internship from Smart Management Consultancy
- Saurjaynee Biswas (Dept. of Food Technology) has successfully completed her internship from International Centre for Culture & Education-United Nation Framework

Many more ...

Institution Innovation Council

Preincubation

GNIT is working on igniting the ideology of starting own ventures amongst the students. The youth of today needs to be more inclined towards creating jobs rather than getting one. Therefore, to assist the students to become self-employed and create employment opportunities, the institute has come forward to provide support in every possible manner. For this purpose GNIT Pre-Incubation Cell has been setup in 2019 which is working as a catalyst for entrepreneurship development within the institute and also for other aspiring youth.

EDC

Entrepreneurship is increasingly recognized as an important driver of economic growth of a country. Even Govt. of India has recognized the importance of entrepreneurship and has introduced programs like "Make in India" & "Start-up India".

The aim of Entrepreneurship Development Cell (EDC) at Guru Nanak Institute of Technology is to develop and strengthen entrepreneurial qualities in the budding professionals who are interested in starting their own ventures. The College provides infrastructure and technical support to the students having innovative ideas to transform into new products and services for the betterment of the society. The EDC also assists all the aspirants with mentoring, planning and execution of their start up idea into a real business. The EDC has maintained a pool of Sponsors like banks, national entrepreneurship training agencies and suppliers, who are willing to aid budding entrepreneurs.

Hence an Entrepreneurship Development Cell was constituted in the college with a dedicated team of actively working faculty who has an industry exposure along with some student representatives. Aspiring engineer entrepreneurs are groomed with the necessary inputs on how to be a successful entrepreneur through workshops and seminars by eminent people from the industry. At GNIT, we encourage the students to consider self-employment as a career option, providing

necessary training in Entrepreneurship skills through standardized courses. The cell also organizes different activities and events from time to time to train and motivate the students on entrepreneurship.

Objective of EDC

- To act as an institutional mechanism for providing various services including information to budding student entrepreneurs.
- To create Entrepreneurial culture in the Parent Institution and other institutions in the region and to promote the objectives of NSTEDB, including programmes related to women and weaker sections of the society
- To foster better linkages between the Parent Institution, Industries and R&D institutions in the region and other related organizations engaged in promoting Small & Medium Enterprises (SMEs) including NGOs and other Voluntary Organizations.
- To catalyze and promote development of S&T based Enterprises and promote employment opportunities
- To respond effectively to the emerging challenges and opportunities both at national and international level relating to SMEs and Micro Enterprises.



Start-up Facility at GNIT

GNIT motivates and encourages student to bring-up their own startup to strengthen the economics backbone of the country. Many startups of students at GNIT are running successfully and they become the recruiters. Some of the successful startups are:

- ✓ **Research Mantra Pvt. Ltd.** by Mr Saumyadeep Bhattacharyya, 2nd Year 4th Semester, ECE.
- ✓ **GROWEVERY Pvt. Ltd.** by Mr Saumyadeep Bhattacharyya, 2nd Year 4th Semester, ECE
- ✓ **Sanhita Distribution Pvt. Ltd.** by Shreya Dey, MCA 1st Year
- ✓ **Chocoholic house Pvt. Ltd.** by Writtika Das, 3rd year, FT
- ✓ **Happy 2 Learn Pvt. Ltd.** by Ashesh Roy Choudhuri, 3rd Year CSE
- ✓ **JIS Solar Power** by Mr. Subhajit Dutta, 2nd Year, EE
- ✓ **TECHEXTREMIS Pvt. Ltd.** by Soumyajit Dutta, 3rd year, AEIE
- ✓ **ITEexperience TechnicaPvt. Ltd.** by Soumyadipta Basu, 3rd Year, IT
- ✓ **Fit & Fine Pvt. Ltd.** by Mr.Sanjay Kr. Biswas,3rd year, BHM
- ✓ **GNIT Media Pvt. Ltd.** by Saurjaynee Biswas (FT), Srijit Pal (CSE), Diganta Das (CSE)



Institution Innovation Council (IIC-GNIT) under MHRD

Institution Innovation Council (IIC-GNIT) had been constituted in our college in 2018 as per the guidelines of the Ministry of Human Resource Development Innovation Cell (MIC)

Ministry of Human Resource Development (MHRD), Govt. of India has established 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). The primary mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are informative years.

MIC has envisioned encouraging creation of 'Institution's Innovation Council (IICs)' across selected HEIs. A network of GNIT's IIC has already been established to promote an innovation eco-system in the campus.

Guru Nanak Institute of Technology has been awarded 5 star certificates and ranked highest in the eastern India.

Name of the Faculty Coordinator: Dr. Sunipa Roy (sunipa.roy@gnit.ac.in)



Academic Exchange Program

Guru Nanak Institute of Technology under JIS GROUP organizes the summer camp and International Knowledge Exchange Programme In collaboration with **Asian Institute of Technology, Bangkok and iExpert Academy, ROSCONGRESS, Russia.**

The students acquired hands on training, seminars, projects and workshops. This International Academic Endeavour will engage students in multidisciplinary and collaborative work encompassing modern Science and Technology.

The tour offered immersive interaction through seminars, workshops and technical discussions with the **Professors, Industry Stalwarts and Researchers from reputed Universities.**



Food and Beverage Facilities

The Canteen is located inside the Campus which accommodates 150 students at a time. The Canteen is operational with full support and is available from 7:00 am to 11:00 pm. The students in the hostels are served 5 times a day from morning tea to dinner. The hostellers and Day Scholars are accommodated with quality food ensuring food safety measures. The Canteen food is also availed by faculty, Staff and guests. All kinds of food are available along with refreshments and beverages.

Students' Common Rooms

GNIT facilitates the students with two common rooms – 1 for Girls and the other for Boys. The common room has a chat lounge where students can socialize and ideate. The facility is spacious and offers recreation through magazines and Newsletter Corner, Display Board to showcase creative works of students in Art, literature, science and engineering. The common room has Table Tennis, Carom and Chess for students to delve in positive engagements. The Projector allows students to watch Sports and other programmes on the Wall Screen. Students also celebrate Birthdays and Achievements of their peers.

Bank ATM Facility Inside The Campus

State Bank of India is operational inside the Campus with 24 hours ATM Facility and Passbook Kiosk. The banking facility inside the Campus caters to all the students and it's a one stop banking solution for the Hostellers and Day Scholars.



Campus Security

The Campus is protected with 24x7 securities comprising of male and female guards from professional agencies. The Campus is well secured with night patrolling. The entire campus is guarded with high perimeter wall and adequate high power lights for the safety of the students and guests. With more than 100 CCTV cameras the infrastructure and entrance and exit points are well scanned 24x7 from the CCTV Control Room.

Hostel Facility at GNIT

The Campus has a dedicated Girls Hostel. There are 2 Boys Hostel. The Hostel Warden takes care of the inhabitants by providing facility management services for all residing in the hostel. Adequate Support and housing staff caters to the students i.e.: Food, Cleanliness, Hygiene, maintenance etc. Entry and exit is documented and approved by Security Service. Night guards are deployed for added security



Gymnasium and Sports Facility

The fitness center caters to the holistic development of the students. One gets an opportunity to revive psychological and physical health through treadmills, cross trainers, cycling, free hand, weight along with Yoga and Meditation.

Converting every individual into a self-reliant and independent citizen, the college provides a blending of scholastic and co-scholastic activities. The college strives to provide facilities in a nurturing environment to the students for a holistic development and hence lays emphasis on physical activities.

GNIT boasts of an excellent basketball court besides a sprawling playground.

The college organizes **Sardar Jodh Singh Challengers Trophy – Annual Cricket Tournament**, apart from **Annual Sports Meet**.

The Institute also encourages students to actively take up team games and participate in **intra-college** and **inter-college competitions**; and state and national competitions to improve their game and at the same time to keep up their spirit of sportsmanship.





Anti-ragging Regulations

Ragging is a heinous crime. Our institute has a zero tolerance approach towards ragging. If anybody is found to be guilty of ragging then as per the guidelines of Hon'ble Supreme Court, he/she will be expelled from the institute. In the near past, ragging was the most fearsome aspect of a fresher's days in college and hostel. Ragging in the past had caused many deaths and led to suicides. Many students dropped out of their course of study and many more students suffered physical injury.

In order to provide the students a safe and secured institute where they can breathe easy and continue with their studies without any fear of ragging, the institute has an active Anti Ragging Committee and an Anti Ragging Squad which carry out strict vigil in the college premises and the hostels.

Following steps are taken to prevent any incidence of ragging:

1. CC camera monitoring of the college premises
2. Deployment of security personnel near 1st year classrooms to keep the senior students away
3. Conduction of programs to spread awareness against ragging
4. Students are required to submit a mandatory anti-ragging declaration online
5. A written undertaking is collected from the students at the time of admission that they would not be involved in any act of ragging.

Name of the Coordinator:

Dr. Adish Kr. Chakroborty (registrar_gnit@jisgroup.org)

Committee

Women Grievance Committee

The Women Grievance Committee of GNIT provides protection against sexual harassment of women at workplace. It is for the prevention and Redressal of complaints of sexual harassment and for matters connected therewith or incidental there to.

Sexual harassment includes such unwanted sexually determined act (whether directly or indirectly) as:

- Physical contact and advances
- A demand or request for unwanted favours
- Showing offendable images and contents
- Any other unwelcome physical, verbal or non-verbal conduct of sexual nature

Name of the Coordinator:

Dr. Sucharita Bhattacharya (sucharita.bhattacharyya@gnit.ac.in)

Student Discipline Committee

This committee takes punctuative measure for the students who indulge in in-disciplinary activities in the campus or during the campus recruitment programme.

It is the duty of the Discipline Committee to ensure compliance with the provisions of UGC/AICTE Regulations.

Name of the Coordinator:

Dr. Adish Kr. Chakraborty (registrar_gnit@jisgroup.org)

Student Council

Student Council is an organization conducted by students and supervised by Faculty. The purpose of the student council of GNIT is to provide students an opportunity to develop leadership by organizing and carrying out different activities and service towards the society. The student council of GNIT helps and shares student ideas, interests and concerns with the other concerned committee.

President: Dr Sunipa Roy , Student Dean, sunipa.roy@gnit.ac.in



IQAC Cell

As per National Assessment and Accreditation Council (NAAC) guidelines, an Internal Quality Assurance Cell (IQAC) has been established at Guru Nanak Institute of Technology in the year of 2015 as a post-accreditation quality sustenance measure. IQAC is a part of the institution's system and works towards realization of the goals of overall quality enhancement of the institution. The process of internal quality assessment is a continuous process and IQAC, GNIT is doing its best for improving the overall quality of the institution. The IQAC, GNIT is led by honourable Principal of the Institution, Prof. (Dr.) Santanu Kumar Sen as Chairman of the cell ably helped by all Professors, Associate Professors of the institution, Head of the departments, along with administrative and management personnel.

The functionalities of the IQAC cell includes

- the setup of CII innovation Centre,
- filing of a good number of workable Patents, signing of MOU with reputed Industries undertaken for working on R&D problem,
- organization for national and international seminars, conferences, giving assistance for applying funds in various Govt. And Non-govt. Agencies,
- organization of various national and international competitions,
- formation of E-Books repository for library, arrangement of need based tutorial sessions arranged on GATE, GRE, MAT, CAT, Civil Service Examinations etc.,
- Making the campus a Green Zone by incorporating E-Waste management, Water and Energy saving schemes etc.,
- Organization of gender equity promotion programmes,
- Establishment of different clubs viz. Robotics, Cultural, Coding clubs, Photography Club etc.,
- Conduction of programs for promotion of universal Values and Ethics,
- Arrangement of various activities regarding the extension activities and Institutional Social Responsibilities (ISR) through NSS like Visit to Old age home, Programs for increasing Environment Consciousness , Visit to the Orphanage Home etc.

Student Societies & Clubs

Coding Club-Bit2Byte

Bit2Byte, the official coding club of GNIT has always been a club with the intention to propagate the interest for programming in every domain, be it application development, competitive programming, artificial intelligence, IoT or networks and security. The main aim of the club is to help the students of GNIT to follow their passion in coding and build a community around it where we learn together. We hold sessions, workshops and competitions among ourselves with the motive to be a better engineer as a whole.

Name of the Faculty Coordinator:

Mr.Tridib Chakrabort (tridib.chakraborty@gnit.ac.in)

Name of the Student Coordinator:

Saswata Mukhopadhyay, 4th year, Computer Science and Engineering



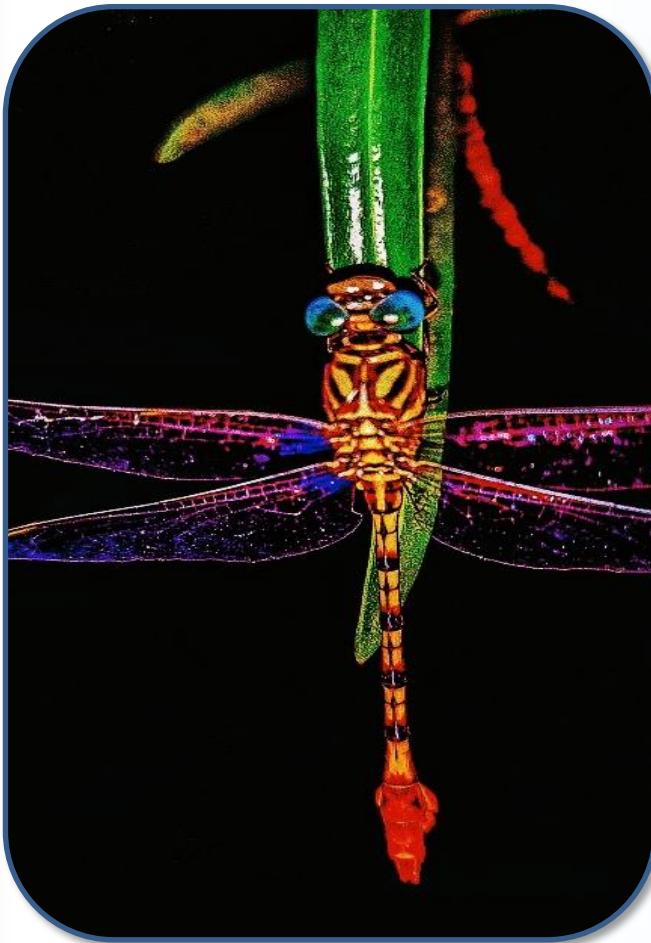
Photography Club

Photography is a brilliant diversion and has proved to be very popular among the students. The Photography Club of GNIT focuses on organizing and collecting fine photographic shots and participating in photographic competitions.

The aim of the club is to promote photographic interest and exchange ideas and share experiences, views and thoughts. The club organizes various lectures, demonstrations, and competitions. It is our practice to welcome everyone with an interest in photography, regardless of their experience.

Name of the Faculty Coordinator:

Mr. Shantanu Chakravarty(shantanu.chakraborty@gnit.ac.in)



Cultural Club

Cultural activities form a major part of the education with a holistic perspective. The main motive of the committee is to provide a platform for students to improve their interpersonal and artistic skills and to showcase their talent. While preparing for the grind of a corporate atmosphere, cultural activities serve to reinvigorate the students and help them to hone their skills and creativity. There is no better way to learn to connect to their fellow men than through a shared experience of culture. The committee aims to improve the bonding of students with the college by celebrating Teachers' day (**Ujan**), organizing Fresher's Welcome (**Sampan**), Annual Fest (**Zyzzva**), Farewell (**Twilight**) etc. Also various cultural activities are organized occasionally for the faculty and staff members of the college.

Name of the Faculty Coordinator: Dr. Sucharita Chakrabarti

(sucharita.chakrabarti@gnit.ac.in)

Name of the Student Coordinator: Previously, Kishaylay Bhowmik (Graduated student, CSE Dept.) and Prajeet Kanungo (Graduated student, EE Dept.)

Presently, Deblina Sen(3rd year FT) and Sagnik Gope(2nd year CSE)





Technical Fest Club

Technical Fest is a subject of glory and pride for any technical institution. **Tesseract**, the 2 day long official technical fest of GNIT really showcases some exceptional talents and quality of growth among the technical students. Events of different domains motivate students to participate and gain competitive and professional skills, and also give a boost to their passion.

Tesseract really focuses on innovation, ideas and great implementation so that they can truly impose positive effects of technology on society. Events like model display brings out the innovative ideas from students, coding events expand logical abilities of competitive coders, robotics event help students think out of the box and nurture their creativity. Tesseract also focuses on joy and entertainment of extracurricular activities so other events like gaming, poster presentation, graffiti, short films etc. were attractive to participants. Tesseract 2020 was such a hit event and also carried the tradition of passionate and greater technical fests.

Name of the Faculty Coordinator: Prof. Tridib Chakraborty

(tridib.chakraborty@gnit.ac.in)

Prof. Suparna Maity (suparna.maity@gnit.ac.in)



National Service Scheme

It was Gandhiji, the Father of the Nation who introduced the idea of *service to the nation* by the youths through practice at the student level keeping in view their social responsibility. After independence, UGC, headed by Dr. Radhakrishnan recommended to incorporate social service at academic institutions on a voluntary basis to develop healthy relationships between teachers and students as well as between the community and the institutions. So National Service Scheme (NSS) is a social education, awareness and amelioration program involving young people in the betterment of socio-economic conditions and working towards environment protection.

Basic aim is the personality development of the students through community service i.e to inculcate the spirit of service in students and redirect their attention to the weaker or underprivileged sections of society. To establish the concept of *Not Me, but You* in the society through selfless service, democratic living, appreciation for others' ideas and consideration for fellow human-being showing *Empathy* in place of sympathy.

The NSS Programme at Guru Nanak Institute of Technology had its beginning in Odd Semester **2010**, under the aegis of the compulsory subject (Code: XC181, later HU 182) in the 1st Year B. Tech course newly introduced in the revised syllabus of WBUT (now MAKAUT) in that year. The teachers of Applied Science and Humanities Dept, under the coordination of the HOD, Dr.Sucharita Bhattacharyya, successfully implemented various programs where 1st Semester B. Tech. students undertook following activities:

- i. Orientation Programme on NSS
- ii. Cleaning activities in the college ground and the classrooms
- iii. Tree planting &
- iv. Making awareness posters on social issues.

GNIT's NSS programme has been running without a break since then.

In the meantime in 2016, MAKAUT has taken the initiative to start NSS SFUs, initially at some of its selected institutions. GURU NANAK INSTITUTE OF TECHNOLOGY (GNIT) has got the opportunity to work as one of the SFUs under NSS from very beginning. Here required financial assistance has to be arranged by the institute itself.

Some of the important Activities are mentioned here:

The student volunteers under GNIT NSS Unit (SFU) were engaged with different types of activities:-

- a) Cleaning Activities (College grounds and classrooms)
- b) Participation in various awareness programs (Anti plastic campaign, Walk for the Book, Walk for Environment, Walk for Save Water, Rally on Dengue and Scrub Typhus, 'Swachhata' Run for Unity and many others as well)
- c) Poster preparation and presentation on various social and awareness issues by the students (Like, Poster competition on Save Water & Save Electricity, Women Empowerment, Environmental issues, Save Tiger & Save Wildlife etc.)
- d) Donation of clothes by the students to the needy people through different charitable organizations.
- e) Initiative taken by the students in raising the benevolent funds from their one-day pocket money (Rs. 40-50) to utilize it for various social activities (funds collected for *Save Tiger Project* through World Wildlife Funds or WWF. The recognition (a panda soft toy, a jute bag and the certificate) came from WWF in their endeavour.
- f) Tree planting
- g) Community services in various forms:-
 - Organizing of Blood donation camp in collaboration with MCA Dept.
 - Distribution of education kit, food packets and sweets to the under privileged students of the local slum area through the primary school adjacent to our college.
 - Distribution of sweets and fruits with the inmates of the old age home in the college surrounding locality to celebrate Deepabali with them.
 - Celebration of Children's day with the inmates of "Goonj - Charitable Society" & "Govinda Home - Orphanage for Girls" to stand by our fellow countrymen and the sweet & innocent children, using urban discard as a tool to alleviate poverty and enhance the dignity of the underprivileged in the world.
 - Distribution of relief to the villagers in the Sunderbans affected by Amphan in May 2020.
 - Distribution of Educational kit, mask, sanitizer, chocolates and sweets among the Sabar girls students from Belpahari, Jhargram at Satyabharati orphange in Nabagram, Hooghly.

- Participation in a blanket distribution programme among the needy in association with the NGO “Pragati” at Dum Dum station.
- h) Celebration of commemorative days and events like, Rabindra Jayanti, International Yoga day, Constitution day, Earth Day, International Women’s day in association with WGRC, GNIT etc.
- i) Green Campus Initiative:-
- Initiation taken in cleaning college surrounding area in association with Panihati Municipality. In this regard, application was given to the Chairman, Panihati municipality. In response to our application, Sanitation Inspector and other officials visited our college campus and college surrounding area and assured us to cooperate in our initiative. We are hopeful to get help from their side in near future.
 - Initiation taken to bring the treated surface water to the college campus from the water treatment plant (under Ganga Action Plan project), Sodepur in order to reduce the use of ground water. In this regard, application was given Panihati municipality and water is made available from Ganga Action Plan by GNIT NSS Unit (SFU).

And many more.....

Name of the Faculty Coordinator:

Dr.Sucharita Bhattacharyya, Convener, GNIT NSS Unit (SFU)

Dr. Mainak Debnath, Program Officer, GNIT NSS Unit (SFU)

Name of the Student Coordinator, year, department: Anargha Bose, 1st year CSE and Sankhadeep Das, 1st year ECE



Tree Plantation program



Awareness program and rally with awareness posters on Dengue and Scrub Typhus



Blood Donation Camp is going on



Money and Cloth donation by the students to different charitable organization



Celebration of International Yoga day



Meeting with Chairman and Sanitation Inspector of Panihati Municipality regarding surface water connectivity



Surface water (made available from Ganga Action Plan) supply line connected with main water reservoir



NSS Unit, GNIT visited the old age home and distributed fruits and sweets among the inmates



Distribution of Educational kit, mask, sanitizer, chocolates and sweets among the Sabar girls students from Belpahari, Jhargram at Satyabharati orphange



Poster preparation and presentation by the students on various issues



Cleaning of the classrooms and labs by the students

Annexure-1

Department of Computer Science and Engineering

Revised Curriculum Structure (To be effective from 2018-19 Admission Batch)

Curriculum for B.Tech

Under Autonomy (GR A: ECE, EE, EIE, BME; GR B: CSE, IT, ME, CE, FT)

1st Semester								
SI No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M 101	Mathematics -I	3	1	0	4	4
2	BS	CH 101/ PH 101	Chemistry (Gr. A) / Physics- I (Gr. B)	3	0	0	3	3
3	ES	EE 101/ EC 101	Basic Electrical Engineering (Gr. A) / Basic Electronics Engineering (Gr. B)	3	0	0	3	3
4	HS	HU 101	English	2	0	0	2	2
Total of Theory							12	12
B. PRACTICAL								
5	BS	CH 191/ PH191	Chemistry Lab (Gr. A) / Physics- I Lab (Gr. B)	0	0	3	3	1.5
6	ES	EE 191/ EC 191	Basic Electrical Engineering Lab (Gr. A) / Basic Electronics Engineering Lab (Gr. B)	0	0	3	3	1.5
7	ES	ME 191/ ME 192	Engineering Graphics & Design (Gr A) / Workshop/Manufacturing Practices (Gr-B)	0	0	3	3	1.5
8	PROJ	PR 191	Project-IA	0	0	1	1	0.5
9	PROJ	PR 192	Project-IB	0	0	1	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
10	MC	MC 181	Induction Program	0	0	0	0	
Total of Theory, Practical & Mandatory Activities/Courses							23	17.5

2 nd Semester								
Sl No	Course Code	Paper Code	Theory	Credit Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M 201	Mathematics -II	3	1	0	4	4
2	BS	CH 201/ PH 201	Chemistry - (Gr. B) / Physics – I (Gr. A)	3	0	0	3	3
3	ES	EE 201/ EC 201	Basic Electrical Engineering (Gr. B) / Basic Electronics Engineering (Gr. A)	3	0	0	3	3
4	ES	CS 201	Programming for Problem Solving	3	0	0	3	3
5	ES	ME 201	Engineering Mechanics	3	0	0	3	3
Total of Theory							16	16
B. PRACTICAL								
6	ES	CS291	Programming for Problem Solving Lab	0	0	3	3	1.5
7	BS	CH 291/ PH 291	Chemistry Lab (Gr. B) / Physics - I Lab (Gr. A)	0	0	3	3	1.5
8	ES	EE 291/ EC 291	Basic Electrical Engineering Lab (Gr. B) / Basic Electronics Engineering Lab (Gr. A)	0	0	3	3	1.5
9	ES	ME 291/ ME 292	Engineering Graphics & Design (Gr B) / Workshop/Manufacturing Practice (Gr-A)	0	0	3	3	1.5
10	HS	HU 291	Language Lab	0	0	2	2	1
11	PROJ	PR 291	Project-II	0	0	1	1	0.5
12	PROJ*	PR 292	Innovative activities-I	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
13	MC	MC 281	NSS/ Physical Activities/Meditation & Yoga/Photography/ Nature Club	0	0	0	3	
Total of Theory, Practical & Mandatory Activities/Courses							34	24.0

* Inter/ Intra Institutional Activities viz; Training with higher Institutions; Soft skill training organized by Training and Placement Cell of the respective institutions; contribution at incubation/ innovation /entrepreneurship cell of the institute; participation in conferences/ workshops/ competitions etc.; Learning at Departmental Lab/ Tinkering Lab/ Institutional workshop; Working in all the activities of Institute's Innovation Council for eg: IPR workshop/Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc. (evaluation by Programme Head through certification)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

3rd Semester								
SL No	Type	Code	THEORY	Contact Hours/Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M(CSE)301	Mathematics-III	3	1	0	4	4
2	BS	PH301	Physics-II	3	0	0	3	3
3	PC	CS301	Digital Electronics and Computer Organization	3	0	0	3	3
4	PC	CS302	Data Structures	3	0	0	3	3
5	ES	CS 303	Circuit Theory and Network	2	0	0	2	2
Total of Theory								15
B. PRACTICAL								
6	BS	PH391	Physics-II Lab	0	0	3	3	1.5
7	PC	CS391	Digital Electronics and Computer Organization Lab	0	0	3	3	1.5
8	PC	CS392	Data Structures Lab	0	0	3	3	1.5
9	PC	CS393	Programming with C++	1	0	2	3	1.5
10	PROJ	PR 391	Project-III	0	0	2	2	1
11	PROJ*	PR 392	Innovative activities-II	0	0	0	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
12	MC	MC 381	Behavioural and Interpersonal Skills	0	0	3	3	
Total of Theory, Practical & Mandatory Activities/Courses								33
								22.5

* Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

4 th Semester							
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Cr edit Points
				L	T	P	
A. THEORY							
1	ES	M(CSE)401	Numerical Methods and Statistics	3	0	0	3
2	HS	HU 402	Economics for Engineers	2	0	0	2
3	PC	CS401	Computer Architecture	3	0	0	3
4	PC	CS402	Design and Analysis of Algorithms	3	0	0	3
5	PC	CS403	Formal Language and Automata Theory	3	0	0	3
Total of Theory							14
B. PRACTICAL							
6	ES	M(CSE)491	Numerical Methods and Statistics Lab	0	0	3	3
7	PC	CS491	Computer Architecture Lab	0	0	3	3
8	PC	CS492	Algorithms Lab	0	0	3	3
9	PROJ	PR 491	Project-IV	0	0	2	2
10	PROJ*	PR 492	Innovative activities-III	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES							
11	MC	MC401	Constitution of India	3	0	0	3
Total of Theory, Practical & Mandatory Activities/Courses							28
20							

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

5 th Semester													
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points					
				L	T	P	Total						
A. THEORY													
1	PC	CS501	Computer Graphics	3	0	0	3	3					
2	PC	CS502	Operating System	3	0	0	3	3					
3	PC	CS503	Data Base Management System	3	0	0	3	3					
4	OE	CS504	A. Object Oriented Programming using Java	3	0	0	3	3					
			B. Multimedia Technology										
			C. Communication Engineering										
5	PE	CS505	A. Operations Research	3	0	0	3	3					
			B. Computational Geometry										
			C. Distributed Algorithms										
Total of Theory				15				15					
B. PRACTICAL													
6	PC	CS591	Computer Graphics Lab	0	0	3	3	1.5					
7	PC	CS592	Operating System Lab	0	0	3	3	1.5					
8	PC	CS 593	Data Base Management System Lab	0	0	3	3	1.5					
9	OE	CS594	A. Object Oriented Programming Lab	0	0	3	3	1.5					
			B. Multimedia Technology Lab										
			C. Communication Engineering Lab										
10	PROJ	PR 591	Project-V	0	0	2	2	1					
11	PROJ*	PR 592	Innovative activities-IV	0	0	0	0	0.5					
C. MANDATORY ACTIVITIES / COURSES													
12	MC	MC 501	Environmental Science	3	0	0	3						
Total	of Theory, Practical & Mandatory Activities/Courses						32	22.5					

* Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

6 th Semester							
Sl No	Course Code	Paper Code	Theory	Contact Hours / Week			Credit Points
				L	T	P	
A. THEORY							
1	PC	CS601	Computer Network	3	0	0	3
2	PC	CS602	Microprocessors and Microcontrollers	2	1	0	3
3	PC	CS603	Software Engineering	3	0	0	3
4	PE	CS604	A. Compiler Design	3	0	0	3
			B. Computer Vision				
			C. Simulation and modelling				
5	OE	CS605	A. Pattern Recognition	3	0	0	3
			B. Distributed Operating System				
			C. Distributed Database				
6	OE	CS606	A. Data Warehousing and Data Mining B. Digital Image Processing C. E-commerce and ERP	3	0	0	3
Total of Theory							
B. PRACTICAL							
7	PC	CS691	Computer Network Lab	0	0	3	3
8	PC	CS692	Microprocessors and Microcontrollers Lab	0	0	3	3
9	PC	CS693	Software Engineering Lab	0	0	3	3
10	PROJ	PR 691	Project-VI	0	0	2	2
11	PROJ*	PR 692	Innovative activities-V	0	0	0	0
C. MANDATORY ACTIVITIES / COURSES							
12	MC	MC 681	Technical Lecture Presentation & Group Discussion-I	0	0	3	3
Total of Theory		Practical & Mandatory Activities/Courses				32	24.0

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

7 th Semester										
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	HS	HU701	Values & Ethics in Profession	2	0	0	2	2		
2	OE	CS701	A. Artificial Intelligence	3	0	0	3	3		
			B. Robotics							
			C. Data Analytics							
3	PE	CS702	A. Soft Computing	3	0	0	3	3		
			B. Natural Language Processing							
			C. Web Technology							
4	PE	CS703	A. Cloud Computing	3	0	0	3	3		
			B. Sensor Network and IOT							
			C. Cryptography and Network Security							
Total of Theory							11	11		
B. PRACTICAL										
5	OE	CS791	A. Artificial Intelligence Lab	0	0	3	3	1.5		
			B. Robotics Lab							
			C. Data Analytics Lab							
6	PE	CS792	A. Soft Computing Lab	0	0	3	3	1.5		
			B. Natural Language Processing Lab							
			C. Web Technology Lab							
8	PROJ	PR 791	Project-VII	0	0	0	6	3		
9	PROJ*	PR 792	Innovative activities-VI	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
10	MC	MC 781	Social Awareness	0	0	3	3			
Total of Theory, Practical & Mandatory Activities/Courses							26	17.5		

*Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head / Event Coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

8 th Semester									
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points		
				L	T	P			
A. THEORY									
1	HS	HU804	Principles of Management	2	0	0	2		
2	PE	CS801	A. Mobile Computing	3	0	0	3		
			B. Bio-informatics						
			C. Cyber Law and Security Policy						
			D. VLSI Design						
3	PE	CS802	A. Parallel Computing	3	0	0	3		
			B. Machine Learning						
			C. Real Time Embedded System						
			D. Advanced Computer Architecture						
Total of Theory							8		
B. PRACTICAL									
4	PC	CS891	Design lab	0	0	2	2		
5	PROJ	PR 891	Project-VIII	0	0	0	6		
C. MANDATORY ACTIVITIES / COURSES									
6	MC	MC 801	Essence of Indian Knowledge Tradition	3	0	0	3		
Total of Theory, Practical & Mandatory Activities/Courses							19		
							12		

Annexure-2

Curriculum Structure (Effective from 2018-19 admission batch)

Department: Electronics & Communication Engineering

Curriculum for B.Tech
Under Autonomy (GR A: ECE, EE, EIE, BME; GR B: CSE, IT, ME, CE, FT)

1 st Semester								
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M 101	Mathematics -I	3	1	0	4	4
2	BS	CH 101/ PH 101	Chemistry (Gr. A) / Physics- I (Gr. B)	3	0	0	3	3
3	ES	EE 101/ EC 101	Basic Electrical Engineering (Gr. A) / Basic Electronics Engineering (Gr. B)	3	0	0	3	3
4	HS	HU 101	English	2	0	0	2	2
Total of Theory							12	12
B. PRACTICAL								
5	BS	CH 191/ PH191	Chemistry Lab (Gr. A) / Physics- I Lab (Gr. B)	0	0	3	3	1.5
6	ES	EE 191/ EC 191	Basic Electrical Engineering Lab (Gr. A) / Basic Electronics Engineering Lab (Gr. B)	0	0	3	3	1.5
7	ES	ME 191/ ME 192	Engineering Graphics & Design (Gr A) / Workshop/Manufacturing Practices (Gr-B)	0	0	3	3	1.5
8	PROJ	PR 191	PROJECT-IA	0	0	1	1	0.5
9	PROJ	PR 192	PROJECT-IB	0	0	1	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
8	MC	MC 181	Induction Program	0	0	0	0	
Total of Theory, Practical & Mandatory Activities/Courses							23	17.5

2 nd							
Sl No	Course Code	Paper Code	Theory	Credit Hours /Week			Credit Points
				L	T	P	
A. THEORY							
1	BS	M 201	Mathematics -II	3	1	0	4
2	BS	CH 201/ PH 201	Chemistry - (Gr. B) / Physics – I (Gr. A)	3	0	0	3
3	ES	EE 201/ EC 201	Basic Electrical Engineering (Gr. B) / Basic Electronics Engineering (Gr. A)	3	0	0	3
4	ES	CS 201	Programming for Problem Solving	3	0	0	3
5	ES	ME 201	Engineering Mechanics	3	0	0	3
Total of Theory							16
B. PRACTICAL							
6	ES	CS291	Programming for Problem Solving Lab	0	0	3	3
7	BS	CH 291/ PH 291	Chemistry Lab (Gr. B) / Physics - I Lab (Gr. A)	0	0	3	3
8	ES	EE 291/ EC 291	Basic Electrical Engineering Lab (Gr. B) / Basic Electronics Engineering Lab (Gr. A)	0	0	3	3
9	ES	ME 291/ ME 292	Engineering Graphics & Design (Gr B) / Workshop/Manufacturing Practice (Gr-A)	0	0	3	3
10	HS	HU 291	Language Lab	0	0	2	2
11	PROJ	PR 291	Project-II	0	0	1	1
12	PROJ*	PR 292	Innovative activities-I	0	0	0	0
C. MANDATORY ACTIVITIES / COURSES							
13	MC	MC 281	NSS/ Physical Activities/Meditation & Yoga/Photography/ Nature Club	0	0	0	3
Total of Theory, Practical & Mandatory Activities/Courses							34
Total of Theory, Practical & Mandatory Activities/Courses							

* Inter/ Intra Institutional Activities viz; Training with higher Institutions; Soft skill training organized by Training and Placement Cell of the respective institutions; contribution at incubation/ innovation /entrepreneurship cell of the institute; participation in conferences/ workshops/ competitions etc.; Learning at Departmental Lab/ Tinkering Lab/ Institutional workshop; Working in all the activities of Institute's Innovation Council for eg: IPR workshop/Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc. (evaluation by Programme Head through certification)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

3 rd Semester							
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points
				L	T	P	
A. THEORY							
1	BS	M 301	Mathematics-III	3	1	0	4
2	ES	M (CS) 301	Numerical Methods	3	0	0	3
3	PC	EC 301	Solid State Devices	3	0	0	3
4	PC	EC 302	Circuit Theory & Networks	3	0	0	3
5	ES	EC 303	Data Structure	3	0	0	3
6	HS	HU 301	Values & Ethics in Profession	2	0	0	2
Total of Theory							18
B. PRACTICAL							
7	ES	M (CS) 391	Numerical Methods Lab	0	0	3	3
8	PC	EC 392	Circuit Theory & Networks Lab	0	0	3	3
9	ES	EC 393	Data Structure Lab	0	0	3	3
10	PROJ	PR 391	Project-III	0	0	2	2
11	PROJ*	PR 392	Innovative activities-II	0	0	0	1
C. MANDATORY ACTIVITIES / COURSES							
12	MC	MC 381	Behavioural & Interpersonal skills	0	0	3	3
Total of Theory, Practical & Mandatory Activities/Courses							33
24							

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

4 th Semester							
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points
				L	T	P	
A. THEORY							
1	BS	PH(ECE) 401	Physics II	3	0	0	3
2	PC	EC 401	Signals & Systems	3	0	0	3
3	PC	EC 402	Analog Electronic Circuits	3	0	0	3
4	PC	EC 403	Digital Electronic Circuits	3	0	0	3
5	PC	EC 404	Antenna & wave propagation	3	0	0	3
Total of Theory							15
B. PRACTICAL							
6	BS	PH(ECE)491	Physics II Lab	0	0	3	3
7	PC	EC 492	Analog Electronic Circuits Lab	0	0	3	3
8	PC	EC 493	Digital Electronic Circuits Lab	0	0	3	3
9	PC	EC 494	Antenna & wave propagation Lab	0	0	3	3
10	PROJ	PR 491	Project-IV	0	0	2	2
11	PROJ*	PR 492	Innovative activities-III	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES							
12	MC	MC 401	Environmental Science	3	0	0	3
Total of Theory, Practical & Mandatory Activities/Courses							32
							22.5

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

5 th Semester										
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	HS	HU 502	Economics for Engineers	2	0	0	2	2		
2	PC	EC 501	Analog & Digital Communication Systems	3	0	0	3	3		
3	PC	EC 502	Microprocessor & Micro Controller	3	0	0	3	3		
4	PC	EC 503	Digital Signal Processing	3	0	0	3	3		
5	PE	EC 504	A. Information Theory & Coding	3	0	0	3	3		
			B. Renewable Energy Sources & Applications							
			C. Nano Electronics							
Total of Theory							14	14		
B. PRACTICAL										
6	PC	EC 591	Analog & Digital Communication Systems Lab	0	0	3	3	1.5		
7	PC	EC 592	Microprocessor & Micro Controller Lab	0	0	3	3	1.5		
8	PC	EC 593	Digital Signal Processing Lab	0	0	3	3	1.5		
10	PROJ	PR 591	Project-V	0	0	2	2	1		
11	PROJ*	PR 592	Innovative activities-IV	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
12	MC	MC 501	Constitution of India	3	0	0	3			
Total of Theory, Practical & Mandatory Activities/Courses							31	20		

* Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

6 th Semester										
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	PC	EC 601	VLSI & Microelectronics	3	0	0	3	3		
2	PC	EC 602	Control System	3	0	0	3	3		
3	PC	EC 603	RF & Microwave Engineering	3	0	0	3	3		
4	PE	EC 604	A. Mobile Communication & Network	3	0	0	3	3		
			B. Advanced Microprocessor & Microcontroller							
			C. Computer Communication & Network Security							
5	OE	EC 605	A. Object Oriented Programming using JAVA	3	0	0	3	3		
			B. Software Engineering							
			C. Machine Learning							
Total of Theory							15	15		
B. PRACTICAL										
6	PC	EC 691	VLSI & Microelectronics Lab	0	0	3	3	1.5		
7	PC	EC 692	Control System Lab	0	0	3	3	1.5		
	PC	EC 693	RF & Microwave Engineering Lab	0	0	3	3	1.5		
8	PE	EC 694	A. Mobile Communication & Network Lab	0	0	3	3	1.5		
			B. Advanced Microprocessor & Microcontroller Lab							
			C. Computer Communication & Network Security Lab							
9	OE	EC 695	A. Object Oriented Programming using JAVA Lab	0	0	3	3	1.5		
			B. Software Engineering Lab							
			C. Machine Learning Lab							
10	PROJ	PR 691	Project-VI	0	0	2	2	1		
11	PROJ*	PR 692	Innovative activities-V	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
12	MC	MC 681	Technical Lecture Presentation & Group Discussion-I	0	0	3	3			
Total of Theory, Practical & Mandatory Activities/Courses							32	24		

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

7 th Semester										
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	HS	HU 704	Principles of Management	2	0	0	2	2		
2	PE	EC 701	A. Satellite & Optical Communication	3	0	0	3	3		
			B. Digital Image & Video Processing							
			C. Remote Sensing & GIS							
3	OE	EC 702	A. Data Base Management Systems	3	0	0	3	3		
			B. Artificial Intelligence & Robotics							
			C. Internet of Things (IOT)							
Total of Theory							8	8		
B. PRACTICAL										
4	PE	EC 791	A. Satellite & Optical Communication Lab	0	0	3	3	1.5		
			B. Digital Image & Video Processing Lab							
			C. Remote Sensing & GIS Lab							
5	OE	EC 792	A. Data Base Management Systems Lab	0	0	3	3	1.5		
			B. Artificial Intelligence & Robotics Lab							
			C. Internet of Things (IOT) Lab							
6	PROJ	PR 791	Project-VII	0	0	0	6	3		
7	PROJ*	PR 792	Innovative activities-VI	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
8	MC	MC 781	Technical Lecture Presentation & Group Discussion-II	0	0	3	3			
Total of Theory, Practical & Mandatory Activities/Courses							23	14.5		

*Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head / Event Coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

8th Semester

Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	PE	EC 801	A. Adaptive Signal Processing	3	0	0	3	3		
			B. Wireless Sensor Network							
			C. Embedded System							
2	OE	EC 802	A. Cloud Computing	3	0	0	3	3		
			B. Data Science							
			C. Block Chain							
3	OE	EC 803	A. Biomedical Electronics & Imaging	3	0	0	3	3		
			B. Introduction to MEMS							
			C. Physical Design, Verification & Testing							
Total of Theory							9	9		
B. PRACTICAL										
4	PE	EC 891	A. Adaptive Signal Processing Lab	0	0	3	3	1.5		
			B. Wireless Sensor Network Lab							
			C. Embedded System Lab							
5	PROJ	PR 891	Project-VIII	0	0	0	6	3		
C. MANDATORY ACTIVITIES / COURSES										
6	MC	MC 801	Essence of Indian Knowledge Tradition	3	0	0	3			
Total of Theory, Practical & Mandatory Activities/Courses							21	13.5		

Mandatory Credit Point=160

Annexure-3

Department: Electrical Engineering
Curriculum Structure & Syllabus
(Effective from 2018-19 admission batch)

Under Autonomy (GR A: ECE, EE, EIE, BME; GR B: CSE, IT, ME, CE, FT)

1st Semester							
Sl. No.	Category	Paper Code	Subject	Contact Hours/Week			Credit Points
				L	T	P	
A. THEORY							
1	BS	M 101	Mathematics - I	3	1	0	4
2	BS	CH 101 / PH 101	Chemistry (Gr. A) / Physics - I (Gr. B)	3	0	0	3
3	ES	EE 101 / EC 101	Basic Electrical Engineering (Gr. A) / Basic Electronics Engineering (Gr. B)	3	0	0	3
4	HS	HU 101	English	2	0	0	2
Total of Theory							12
B. PRACTICAL							
5	BS	CH 191 / PH 191	Chemistry Laboratory (Gr. A) / Physics - I Laboratory (Gr. B)	0	0	3	3
6	ES	EE 191 / EC 191	Basic Electrical Engineering Laboratory (Gr. A) / Basic Electronics Engineering Laboratory (Gr. B)	0	0	3	3
7	ES	ME 191 / ME 192	Engineering Graphics & Design (Gr. A) / Workshop/Manufacturing Practices (Gr. B)	0	0	3	3
8	PROJ	PR 191	Project – IA	0	0	1	1
9	PROJ	PR 192	Project – IB	0	0	1	1
C. MANDATORY ACTIVITIES / COURSES							
10	MC	MC 181	Induction Program	0	0	0	0
Total of Theory, Practical & Mandatory Activities / Courses							23
17.5							

* Project – I on any one practical paper (0.5 credit)

2nd Semester								
Sl. No.	Category	Paper Code	Subject	Contact Hours/Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M 201	Mathematics - II	3	1	0	4	4
2	BS	CH 201 / PH 201	Chemistry (Gr. B) / Physics - I (Gr. A)	3	0	0	3	3
3	ES	EE 201 / EC 201	Basic Electrical Engineering (Gr. B) / Basic Electronics Engineering (Gr. A)	3	0	0	3	3
4	ES	CS 201	Programming for Problem Solving	3	0	0	3	3
5	ES	ME 201	Engineering Mechanics	3	0	0	3	3
Total of Theory							16	16
B. PRACTICAL								
6	ES	CS 291	Programming for Problem Solving Laboratory	0	0	3	3	1.5
7	BS	CH 291 / PH 291	Chemistry Laboratory (Gr. B) / Physics - I Laboratory (Gr. A)	0	0	3	3	1.5
8	ES	EE 291 / EC 291	Basic Electrical Engineering Laboratory (Gr. B) / Basic Electronics Engineering Laboratory (Gr. A)	0	0	3	3	1.5
9	ES	ME 291 / ME 292	Engineering Graphics & Design (Gr. B) / Workshop/Manufacturing Practices (Gr. A)	0	0	3	3	1.5
10	HS	HU 291	Language Laboratory	0	0	2	2	1
11	PROJ	PR 291	Project – II	0	0	1	1	0.5
12	PROJ*	PR 292	Innovative Activities – I	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
13	MC	MC 281	NSS / Physical Activities / Meditation & Yoga / Photography / Nature Club	0	0	0	3	0
Total of Theory, Practical & Mandatory Activities / Courses							34	24

* Inter/ Intra Institutional Activities viz; Training with higher Institutions; Soft skill training organized by Training and Placement Cell of the respective institutions; contribution at incubation / innovation / entrepreneurship cell of the institute; participation in conferences / workshops / competitions etc.; Learning at Departmental Lab / Tinkering Lab / Institutional workshop; Working in all the activities of Institute's Innovation Council for e.g., IPR workshop / Leadership Talks / Idea / Design / Innovation / Business Completion / Technical Expos etc. (evaluation by Programme Head through certification)

Innovative activities to be evaluated by the Programme Head / Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

3rd Semester

Sl. No.	Category	Paper Code	Subject	Contact Hours/Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	ES	EE 301	Electrical Circuit Analysis	3	1	0	4	4
2	PC	EE 302	Measurement and Instrumentation	3	0	0	3	3
3	PC	EE 303	Analog Electronics	3	0	0	3	3
4	BS	M(EE) 301	Mathematics – III	3	1	0	4	4
Total of Theory							14	14
B. PRACTICAL								
5	ES	EE 391	Electrical Circuit Analysis Laboratory	0	0	3	3	1.5
6	PC	EE 392	Measurement and Instrumentation Laboratory	0	0	3	3	1.5
7	PC	EE 393	Analog Electronics Laboratory	0	0	2	2	1
8	PROJ	PR 391	Project – III	0	0	2	2	1
9	PROJ*	PR 392	Innovative Activities – II	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
10	MC	MC 301	Environmental Science	3	0	0	3	0
Total of Theory, Practical & Mandatory Activities / Courses							27	19.5

* Students may choose either to work on participation in all the activities of Institute's Innovation Council for e.g., IPR workshop/ Leadership Talks / Idea / Design / Innovation / Business Completion / Technical Expos etc.

Innovative activities to be evaluated by the Programme Head / Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

4th Semester

Sl. No.	Category	Paper Code	Subject	Contact Hours/Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	PH 401	Physics – II	3	0	0	3	3
2	PC	EE 401	Electrical Machines – I	3	0	0	3	3
3	PC	EE 402	Power Electronics	3	0	0	3	3
4	PC	EE 403	Digital Electronics	3	0	0	3	3
5	PC	EE 404	Electromagnetic Fields	2	0	0	2	2
6	HS	HU 401	Values and Ethics in Profession	2	0	0	2	2
Total of Theory							16	16
B. PRACTICAL								
7	BS	PH 491	Physics – II Laboratory	0	0	3	3	1.5
8	PC	EE 491	Electrical Machines – I Laboratory	0	0	3	3	1.5
9	PC	EE 492	Power Electronics Laboratory	0	0	3	3	1.5
10	PC	EE 493	Digital Electronics Laboratory	0	0	2	2	1
11	PROJ	PR 491	Project – IV	0	0	2	2	1
12	PROJ*	PR 492	Innovative Activities – III	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
13	MC	MC 481	Behavioural & Interpersonal Skills	0	0	3	3	0
Total of Theory, Practical & Mandatory Activities / Courses							32	23

5th Semester

Sl. No.	Category	Paper Code	Subject	Contact Hours/Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	PC	EE 501	Electrical Machines – II	3	0	0	3	3		
2	PC	EE 502	Power System – I	3	0	0	3	3		
3	PC	EE 503	Control System – I	3	0	0	3	3		
4	OE	EE 504	A. Data Structure	3	0	0	3	3		
			B. Computer Network							
			C. Internet of Things							
5	PE	EE 505	A. Electrical Energy Conservation and Auditing	3	0	0	3	3		
			B. Electromagnetic Waves							
			C. Illumination Engineering							
			D. Power Plant Engineering							
Total of Theory							15	15		
B. PRACTICAL										
6	PC	EE 591	Electrical Machines – II Laboratory	0	0	3	3	1.5		
7	PC	EE 592	Power System – I Laboratory	0	0	3	3	1.5		
8	PC	EE 593	Control System – I Laboratory	0	0	3	3	1.5		
9	OE	EE 594	A. Data Structure Laboratory	0	0	3	3	1.5		
			B. Computer Network Laboratory							

			C. Internet of Things Laboratory					
10	PROJ	PR 591	Project – V	0	0	2	2	1
11	PROJ*	PR 592	Innovative Activities – IV	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
12	MC	MC 501	Constitution of India	3	0	0	3	0
Total of Theory, Practical & Mandatory Activities / Courses							32	22.5

* Students may choose either to work on participation in Hackathons etc. Development of new product / Business Plan / registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry / NGO's / Government organizations / Micro / Small / Medium enterprises to make themselves ready for the industry / Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head / Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

6th Semester

Sl. No.	Category	Paper Code	Subject	Contact Hours/Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	PC	EE 601	Microprocessor and Microcontroller	3	0	0	3	3		
2	PC	EE 602	Power System – II	3	0	0	3	3		
3	PC	EE 603	Control System – II	3	0	0	3	3		
4	OE	EE 604	A. Data Base Management System	3	0	0	3	3		
			B. Embedded Systems							
			C. Software Engineering							
5	PE	EE 605	A. Digital Signal Processing	3	0	0	3	3		
			B. High Voltage Engineering							
			C. Computer Architecture							
Total of Theory							15	15		
B. PRACTICAL										
6	PC	EE 691	Microprocessor and Microcontroller Laboratory	0	0	2	2	1		
7	PC	EE 692	Power System – II Laboratory	0	0	3	3	1.5		
8	PC	EE 693	Control System – II Laboratory	0	0	3	3	1.5		
9	OE	EE 694	A. Data Base Management System Laboratory	0	0	3	3	1.5		
			B. Embedded Systems Laboratory							
			C. Software Engineering Laboratory							
10	PROJ	PR 691	Project – VI	0	0	2	2	1		
11	PROJ*	PR 692	Innovative Activities – V	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
12	MC	MC 681	Technical Lecture Presentation & Group Discussion – I	0	0	3	3	0		
Total of Theory, Practical & Mandatory Activities / Courses							31	22		

* Students may choose either to work on participation in all the activities of Institute's Innovation Council for e.g., IPR workshop / Leadership Talks / Idea / Design / Innovation / Business Completion / Technical Expos etc.

Innovative activities to be evaluated by the Programme Head / Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

7th Semester

Sl. No.	Category	Paper Code	Subject	Contact Hours/Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	PC	EE 701	Electrical Drives	3	0	0	3	3
2	OE	EE 702	A. Object Oriented Programming using JAVA	3	0	0	3	3
			B. Big Data Analysis					
			C. Digital Image Processing					
3	PE	EE 703	A. Power System – III	3	0	0	3	3
			B. Restructured Electrical Power System					
			C. Computer Applications in Power System					
4	PE	EE 704	A. Power System Dynamics and Control	3	0	0	3	3
			B. Power Quality and FACTS					
			C. HVDC Transmission Systems					
5	HS	HU 703	Industrial and Financial Management	2	0	0	2	2
Total of Theory							14	14
B. PRACTICAL								
6	PC	EE 791	Electrical Drives Laboratory	0	0	3	3	1.5
7	OE	EE 792	A. Object Oriented Programming Laboratory	0	0	3	3	1.5
			B. Big Data Analysis Laboratory					
			C. Digital Image Processing Laboratory					
8	PROJ	PR 791	Project – VII	0	0	0	6	3
9	PROJ*	PR 792	Innovative Activities – VI	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
10	MC	MC 781	Technical Lecture Presentation & Group Discussion – II	0	0	3	3	0
Total of Theory, Practical & Mandatory Activities / Courses							29	20.5

* Students may choose either to work on participation in Hackathons etc. Development of new product / Business Plan / registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry / NGO's / Government organizations / Micro / Small / Medium enterprises to make themselves ready for the industry / Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head / Event Coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

8th Semester

Sl No	Category	Paper Code	Subject	Contact Hours/Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	PE	EE 801	A. Wind and Solar Energy Systems	2	0	0	2	2
			B. Utilization of Electric Power					
			C. Line Commutated and Active Rectifiers					
2	PE	EE 802	A. Advanced Electric Drives	3	0	0	3	3
			B. Control Systems Design					
			C. Industrial Electrical System					
3	HS	HU 801	Principles of Management	2	0	0	2	2
Total of Theory							7	7
B. PRACTICAL								
4	PROJ	PR 891	Project – VIII	0	0	8	8	4
C. MANDATORY ACTIVITIES / COURSES								
5	MC	MC 804	Essence of Indian Knowledge Tradition	3	0	0	3	0
Total of Theory, Practical & Mandatory Activities / Courses							18	11



Annexure-4

Revised Curriculum Structure (to be effective from 2018-19 admission batch)

Department: FOOD TECHNOLOGY

Curriculum for B. Tech.

Under Autonomy (GR A: ECE, EE, EIE, BME; GR B: CSE, IT, ME, CE, FT)

I ST Semester								
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M 101	Mathematics -I	3	1	0	4	4
2	BS	CH 101/ PH 101	Chemistry (Gr. A) / Physics- I (Gr. B)	3	0	0	3	3
3	ES	EE 101/ EC 101	Basic Electrical Engineering (Gr. A) / Basic Electronics Engineering (Gr. B)	3	0	0	3	3
4	HS	HU 101	English	2	0	0	2	2
Total of Theory							12	12
B. PRACTICAL								
5	BS	CH 191/ PH191	Chemistry Lab (Gr. A) / Physics- I Lab (Gr. B)	0	0	3	3	1.5
6	ES	EE 191/ EC 191	Basic Electrical Engineering Lab (Gr. A) / Basic Electronics Engineering Lab (Gr. B)	0	0	3	3	1.5
7	ES	ME 191/ ME 192	Engineering Graphics & Design (Gr A) / Workshop/Manufacturing Practices (Gr-B)	0	0	3	3	1.5
8	PROJ	PR 191	PROJECT-IA	0	0	1	1	0.5
9	PROJ	PR 192	PROJECT-IB	0	0	1	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
10	MC	MC 181	Induction Program	0	0	0	0	
Total of Theory, Practical & Mandatory Activities/Courses							22	17.5

2 nd Semester								
Sl No	Course Code	Paper Code	Theory	Credit Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M 201	Mathematics -II	3	1	0	4	4
2	BS	CH 201/ PH 201	Chemistry - (Gr. B) / Physics – I (Gr. A)	3	0	0	3	3
3	ES	EE 201/ EC 201	Basic Electrical Engineering (Gr. B) / Basic Electronics Engineering (Gr. A)	3	0	0	3	3
4	ES	CS 201	Programming for Problem Solving	3	0	0	3	3
5	ES	ME 201	Engineering Mechanics	3	0	0	3	3
Total of Theory							16	16
B. PRACTICAL								
6	ES	CS291	Programming for Problem Solving Lab	0	0	3	3	1.5
7	BS	CH 291/ PH 291	Chemistry Lab (Gr. B) / Physics - I Lab (Gr. A)	0	0	3	3	1.5
8	ES	EE 291/ EC 291	Basic Electrical Engineering Lab (Gr. B) / Basic Electronics Engineering Lab (Gr. A)	0	0	3	3	1.5
9	ES	ME 291/ ME 292	Engineering Graphics & Design (Gr B) / Workshop/Manufacturing Practice (Gr-A)	0	0	3	3	1.5
10	HS	HU 291	Language Lab	0	0	2	2	1
11	PROJ	PR 291	Project-II	0	0	1	1	0.5
12	PROJ*	PR 292	Innovative activities-I	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
13	MC	MC 281	NSS/ Physical Activities/Meditation & Yoga/Photography/ Nature Club	0	0	0	3	
Total of Theory, Practical & Mandatory Activities/Courses							34	24.0

* Inter/ Intra Institutional Activities viz; Training with higher Institutions; Soft skill training organized by Training and Placement Cell of the respective institutions; contribution at incubation/ innovation /entrepreneurship cell of the institute; participation in conferences/ workshops/ competitions etc.; Learning at Departmental Lab/ Tinkering Lab/ Institutional workshop; Working in all the activities of Institute's Innovation Council for eg: IPR workshop/Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc. (evaluation by Programme Head through certification)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

3 rd Semester								
Sl No	Field	Paper Code	Theory	Contact Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	ES	CH(FT) 301	Environmental Engineering	2	0	0	2	2
2	BS	CH(FT) 302	Chemistry-2	2	1	0	3	3
3	ES	FT 301	Thermodynamics & Kinetics	2	1	0	3	3
4	PC	FT 302	Food Microbiology	2	1	0	3	3
5	PC	FT303	Chemistry of food	2	1	0	3	3
Total of Theory								14
B. PRACTICAL								
6	ES	CH (FT)391	Environmental Engineering Lab	0	0	3	3	1.5
7	BS	CH(FT)392	Chemistry-2 Lab	0	0	3	3	1.5
8	PC	FT391	Chemistry of Food Lab-I	0	0	3	3	1.5
9	PC	FT392	Food Microbiology Lab	0	0	3	3	1.5
10	PROJ	PR 391	Project-III	0	0	2	2	1
11	PROJ*	PR 392	Innovative activities-II	0	0	0	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
12	MC	MC 381	Behavioral and Interpersonal Skills	0	0	3	3	
Total of Theory, Practical & Mandatory Activities/Courses								32
								21.5

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

4 th Semester										
Sl No	Field	Paper Code	Theory	Contact Hours /Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	ES	M(FT)401	Numerical Methods	2	0	0	2	2		
2	PC	FT401	Biochemistry & Nutrition	2	1	0	3	3		
3	BS	CH401	Chemical Stoichiometry	2	1	0	3	3		
4	PC	FT402	Principles of Food Preservation	2	1	0	3	3		
5	HS	HU 401	Values & Ethics in Profession	2	0	0	2	2		
6	PE	FT 403	A. Unit Operation of Chemical Engineering-1	3	0	0	3	3		
			B. Transport Phenomena							
Total of Theory							16	16		
B. PRACTICAL										
6	PC	FT491	Biochemistry Lab	0	0	3	3	1.5		
7	PC	FT 492	Chemistry of Food Lab-II	0	0	3	3	1.5		
8	PE	FT 493	A. Unit operation Lab-I	0	0	3	3	1.5		
			B. Transport phenomena Lab							
9	PROJ	PR 491	Project-IV	0	0	2	2	1		
10	PROJ*	PR 492	Innovative activities-III	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
11.	MC	MC 401	Environment Sciences	3	0	0	3			
Total of Theory, Practical & Mandatory Activities/Courses							30	22		

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

5 th Semester														
Sl No	Field	Paper Code	Theory	Contact Hours /Week				Credit Points						
				L	T	P	Total							
A. THEORY														
1	HS	HU 502	Economics for Engineers	2	0	0	2	2						
2	PC	FT501	Food Process Technology-I (Cereals, Fruits, Vegetables, Beverages)	3	0	0	3	3						
3	PC	FT502	Food Process Technology-II (Fish, Meat, Poultry)	3	1	0	4	4						
4	PC	FT503	Food Process Engineering	2	1	0	3	3						
5	PE	FT 504	A. Unit Operations of Chemical Engineering-II	3	0	0	3	3						
			B. Separation Process											
Total of Theory								15						
B. PRACTICAL														
6	PC	FT591	Food Processing Lab-I	0	0	3	3	1.5						
7	PC	FT592	Food Analysis & Quality Control Lab	0	0	3	3	1.5						
8	PE	FT 593	A. Unit Operation Lab-II	0	0	3	3	1.5						
			B. Separation Process Lab											
9	PROJ	PR 591	Project-V	0	0	2	2	1						
10	PROJ*	PR 592	Innovative activities-IV	0	0	0	0	0.5						
C. MANDATORY ACTIVITIES / COURSES														
11.	MC	MC 581	Social Awareness	0	0	3	3							
Total of Theory, Practical & Mandatory Activities/Courses								29						
								21						

* Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small / Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

6 th Semester													
Sl No	Field	Paper Code	Theory	Contact Hours /Week				Credit Points					
				L	T	P	Total						
A. THEORY													
1	PC	FT601	Food Process Technology–III (Milk and Milk Products)	3	1	0	4	4					
2	PC	FT602	Food Process Technology–IV (Edible Fats and Oils)	3	1	0	4	4					
3	PC	FT603	Bakery, Confectionary and Extruded Foods	3	0	0	3	3					
4	OE	FT604	A. Microbial Technology & Food Biotechnology	3	0	0	3	3					
			B. Environmental Biotechnology										
5	OE	FT 605	A. Data Structure and Algorithm	3	0	0	3	3					
			B. Database Management System										
			C. Software Engineering										
Total of Theory							17	17					
B. PRACTICAL													
6	PC	FT 691	Food Processing Lab-II	0	0	3	3	1.5					
7	OE	FT 692	A. Microbial Technology Lab	0	0	3	3	1.5					
			B. Environmental Biotechnology Lab										
8	OE	FT 693	A. Data Structure and Algorithm Lab	0	0	3	3	1.5					
			B. Database Management System Lab										
			C. Software Engineering Lab										
9	PROJ	PR 691	Project-VI	0	0	2	2	1					
10	PROJ*	PR 692	Innovative activities-V	0	0	0	0	0.5					
C. MANDATORY ACTIVITIES / COURSES													
11	MC	MC601	Constitution of India	3	0	0	3						
Total of Theory, Practical & Mandatory Activities/Courses							31	23					

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

7 th Semester													
Sl No	Field	Paper Code	Theory	Contact Hours /Week				Credit Points					
				L	T	P	Total						
A. THEORY													
1	HS	HU704	Principles of Management	2	0	0	2	2					
2	PC	FT701	Waste Management of Food Industries	2	1	0	3	3					
3	PE	FT 702	A. Enzyme Technology	3	0	0	3	3					
			B. Renewable Energy Technology										
			C. Plant Maintenance, Safety & Hygiene										
4	PE	FT703	A. Food Packaging Technology	3	0	0	3	3					
			B. Functional Foods & Nutraceuticals										
			C. Protein Technology										
5	OE	FT 704	A. Process Instrumentation	3	0	0	3	3					
			B. Process Control Systems										
Total of Theory							14	14					
B. PRACTICAL													
6	PC	FT791	Food Engineering Lab	0	0	3	3	1.5					
7	OE	FT792	A. Instrumentation Laboratory	0	0	2	2	1					
			B. Process Control Systems Laboratory										
8	PROJ	PR 791	Project-VII	0	0	0	5	2.5					
9	PROJ*	PR 792	Innovative activities-VI	0	0	0	0	0.5					
C. MANDATORY ACTIVITIES / COURSES													
10	M C	MC781	Innovation-Project Based-Sc. Tech, Social, Design & Innovation	0	0	3	3						
Total of Theory, Practical & Mandatory Activities/Courses							27	19.5					

*Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small / Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head / Event Coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

8 th Semester														
Sl No	Field	Paper Code	Theory	Contact Hours /Week				Credit Points						
				L	T	P	Total							
A. THEORY														
1	OE	FT 801	A. Entrepreneurship Development and start-up management	3	0	0	3	3						
			B. Project Engineering & Plant Layout											
2	PE	FT802	A. Principles of Biochemical Engineering	3	0	0	3	3						
			B. Modeling & Simulation of Food Processing											
Total of Theory								6						
B. PRACTICAL														
3	PC	FT891	Product Development & Quality Assurance Lab	0	0	3	3	1.5						
4	PROJ	PR 891	Project-VIII	0	0	8	8	4						
C. MANDATORY ACTIVITIES / COURSES														
5	M C	MC801	Essence of Indian Knowledge Tradition	3	0	0	3							
Total of Theory, Practical & Mandatory Activities/Courses								20						
11.5														

Mandatory Credit Point=160

For Honors additional 20 Credit Point is to be earned (1st Sem to 8th Sem) through MOOCs courses. All the Certificates received by the students across all semester for MOOCs Courses from approved organization ([Appendix A](#)) is to be submitted to CoE office prior to 8th Semester Examination.

Credit Distribution Ratio:

Category	Total Credit Allocation	Credit Allocation As per AICTE
Basic Sciences (BS)	24.5	25*
Humanities & Social Sciences (HS)	9	12*
Engineering Sciences and Skills (ES)	28	24*
Professional Core (PC)	49.5	48*
Professional Electives (PE)	18	18*
Open Elective (OE)	16	18*
Project work, seminar, internship	15	15*
Mandatory Courses [Environmental Sciences, Induction training, Indian Constitution, Essence of Indian Knowledge Tradition etc.]	(non-credit)	(non-credit)
Total	160	160

*Minor variation is allowed as per need of the respective disciplines (as per AICTE)

Annexure-5

Curriculum Structure

(Effective from 2018-19 Admission Batch)

Department: Information Technology

Curriculum for B. Tech Under Autonomy
(GR A: ECE, EE, BME; GR B: CSE, IT, ME, CE)

1 st Semester							
SI No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points
				L	T	P	
A. THEORY							
1	BS	M101	Mathematics -I	3	1	0	4
2	BS	CH101/ PH101	Chemistry (Gr. A) / Physics- I (Gr. B)	3	0	0	3
3	ES	EE101/ EC101	Basic Electrical Engineering (Gr. A) / Basic Electronics Engineering (Gr. B)	3	0	0	3
4	HS	HU101	English	2	0	0	2
Total of Theory							12
B. PRACTICAL							
5	BS	CH191/ PH191	Chemistry Lab (Gr. A) / Physics- I Lab (Gr. B)	0	0	3	3
6	ES	EE191/ EC191	Basic Electrical Engineering Lab (Gr. A) / Basic Electronics Engineering Lab (Gr. B)	0	0	3	3
7	ES	ME191/ ME192	Engineering Graphics & Design (Gr A) / Workshop / Manufacturing Practices (Gr-B)	0	0	3	3
8	PROJ	PR191	Project-IA	0	0	1	1
9	PROJ	PR192	Project-IB	0	0	1	0.5
C. MANDATORY ACTIVITIES / COURSES							
10	MC	MC181	Induction Program	0	0	0	0
Total of Theory, Practical & Mandatory Activities/Courses							23
							17.5

2 nd Semester								
Sl No	Course Code	Paper Code	Theory	Credit Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M201	Mathematics -II	3	1	0	4	4
2	BS	CH201/ PH201	Chemistry - (Gr. B) / Physics – I (Gr. A)	3	0	0	3	3
3	ES	EE201/ EC201	Basic Electrical Engineering (Gr. B) / Basic Electronics Engineering (Gr. A)	3	0	0	3	3
4	ES	CS201	Programming for Problem Solving	3	0	0	3	3
5	ES	ME201	Engineering Mechanics	3	0	0	3	3
Total of Theory							16	16
B. PRACTICAL								
6	ES	CS291	Programming for Problem Solving Lab	0	0	3	3	1.5
7	BS	CH291/ PH291	Chemistry Lab (Gr. B) / Physics - I Lab (Gr. A)	0	0	3	3	1.5
8	ES	EE291/ EC291	Basic Electrical Engineering Lab (Gr. B) / Basic Electronics Engineering Lab (Gr. A)	0	0	3	3	1.5
9	ES	ME291/ ME292	Engineering Graphics & Design (Gr B) / Workshop/Manufacturing Practice (Gr-A)	0	0	3	3	1.5
10	HS	HU291	Language Lab	0	0	2	2	1
11	PROJ	PR291	Project-II	0	0	1	1	0.5
12	PROJ*	PR292	Innovative Activities-I	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
13	MC	MC281	NSS/ Physical Activities/Meditation & Yoga/Photography/ Nature Club	0	0	0	3	
Total of Theory, Practical & Mandatory Activities/Courses							34	24.0

* Inter/ Intra Institutional Activities viz; Training with higher Institutions; Soft skill training organized by Training and Placement Cell of the respective institutions; contribution at incubation/ innovation /entrepreneurship cell of the institute; participation in conferences/ workshops/ competitions etc.; Learning at Departmental Lab/ Tinkering Lab/ Institutional workshop; Working in all the activities of Institute's Innovation Council for eg: IPR workshop/Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc. (evaluation by Programme Head through certification)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

3rd Semester								
SL No	Type	Code	THEORY	Contact Hours/Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	PC	IT301	Data Structure and Algorithm	3	0	0	3	3
2	PC	IT302	Analog and Digital Electronics	3	0	0	3	3
3	BS	M(IT)301	Mathematics -III	3	1	0	4	4
4	BS	PH301	Physics-II	3	0	0	3	3
5	ES	M(IT)302	Numerical Methods and Statistics	3	0	0	3	3
Total of Theory							16	16
B. PRACTICAL								
6	PC	IT391	Data Structure Lab	0	0	3	3	1.5
7	PC	IT392	Analog and Digital Electronics Lab	0	0	3	3	1.5
8	BS	PH391	Physics-II Lab	0	0	3	3	1.5
9	ES	M(IT)392	Numerical Methods and Statistics Lab	0	0	3	3	1.5
10	PROJ	PR391	Project-III	0	0	2	2	1
11	PROJ*	PR392	Innovative Activities-II	0	0	0	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
12	MC	MC381	Behavioural and Interpersonal Skills	0	0	3	3	
Total of Theory, Practical & Mandatory Activities/Courses							34	23.5

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

4 th Semester							
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points
				L	T	P	
A. THEORY							
1	PC	IT401	Computer Organization & Architecture	3	0	0	3
2	PC	IT402	Object Oriented Programming using Java	3	0	0	3
3	PC	IT403	Formal Language and Automata Theory	3	0	0	3
4	PC	IT404	Communication Engineering & Coding Theory	3	0	0	3
5	HS	HU401	Values & Ethics in Profession	2	0	0	2
Total of Theory							14
B. PRACTICAL							
6	PC	IT491	Computer Organization & Architecture Lab	0	0	3	3
7	PC	IT492	Object Oriented Programming Lab	0	0	3	3
8	PC	IT493	Programming Skill Development Lab	0	0	3	3
9	PROJ	PR491	Project-IV	0	0	2	2
10	PROJ*	PR492	Innovative Activities-III	0	0	0	0
C. MANDATORY ACTIVITIES / COURSES							
11	MC	MC401	Environmental Science	0	0	3	3
Total of Theory, Practical & Mandatory Activities/Courses							28
20							

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

5 th Semester										
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	PC	IT501	Design & Analysis of Algorithm	3	0	0	3	3		
2	PC	IT502	Software Engineering	3	0	0	3	3		
3	PC	IT503	Operating System	3	0	0	3	3		
4	HS	HU503	Industrial & Financial Management	2	0	0	2	2		
5	PE	IT504	A. Programming Practice with C++	3	0	0	3	3		
			B. Artificial Intelligence and Expert System Lab							
			C. Microprocessor and Microcontroller Lab							
Total of Theory							14	14		
B. PRACTICAL										
6	PC	IT591	Algorithm Lab	0	0	3	3	1.5		
7	PC	IT592	Software Engineering Lab	0	0	3	3	1.5		
8	PC	IT593	Operating System Lab	0	0	3	3	1.5		
9	PE	IT594	A. Programming Practice with C++ Lab	0	0	3	3	1.5		
			B. Artificial Intelligence and Expert System Lab							
			C. Microprocessor and Microcontroller Lab							
10	PROJ	PR591	Project-V	0	0	2	2	1		
11	PROJ*	PR592	Innovative Activities-IV	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
12	MC	MC501	Constitution of India	3	0	0	3			
Total of Theory, Practical & Mandatory Activities/Courses							31	21.5		

* Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

6 th Semester									
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points		
				L	T	P			
A. THEORY									
1	PC	IT601	Database Management System	3	0	0	3		
2	PC	IT602	Web Technology	3	0	0	3		
3	PC	IT603	Computer Networking	3	0	0	3		
4	PE	IT604	A. E-Commerce and ERP	3	0	0	3		
			B. Digital Image Processing						
			C. Soft Computing						
Total of Theory							12		
B. PRACTICAL									
5	PC	IT691	Database System Lab	0	0	3	3		
6	PC	IT692	Web Technology Lab	0	0	3	3		
7	PC	IT693	Computer Networking Lab	0	0	3	3		
8	PE	IT694	A. E-Commerce and ERP Lab	0	0	3	1.5		
			B. Digital Image Processing Lab						
			C. Soft Computing Lab						
9	PROJ	PR691	Project-VI	0	0	2	2		
10	PROJ*	PR692	Innovative Activities-V	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES									
11	MC	MC681	Technical Lecture Presentation & Group Discussion-I	0	0	3	3		
Total of Theory, Practical & Mandatory Activities/Courses							29		
							19.5		

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

7 th Semester									
Sl No	Course Code	Paper Code	Theory	Contact Hours/Week			Credit Points		
				L	T	P			
A. THEORY									
1	PE	IT701	A. Cloud Computing	3	0	0	3		
			B. Computer Graphics and Multimedia						
			C. Distributed System						
			D. Machine Learning						
2	PE	IT702	A. Cryptography and Network Security	3	0	0	3		
			B. Data Warehousing and Data Mining						
			C. Advanced Computer Architecture						
			D. Compiler Design						
3	OE	IT703	A. Sensor Network	3	0	0	3		
			B. Pattern Recognition						
			C. Internet Technology						
			D. Robotics						
4	OE	IT704	A. Modeling and Simulation	3	0	0	3		
			B. Microelectronics and VLSI Design						
			C. Mobile Communication						
			D. Operations Research						
Total of Theory							12		
B. PRACTICAL									
5	PE	IT791	A. Cloud Computing Lab	0	0	3	1.5		
			B. Computer Graphics and Multimedia Lab						
			C. Distributed System Lab						
			D. Machine Learning using R Programming Lab						
6	PROJ	PR791	Project-VII	0	0	9	9		
7	PROJ*	PR792	Innovative Activities-VI	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES									
8	MC	MC781	Seminar/GD/ Presentation Skill/ Foreign Language	0	0	3	3		
Total of Theory, Practical & Mandatory Activities/Courses							27		
							18.5		

*Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head / Event Coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

8 th Semester									
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points		
				L	T	P			
A. THEORY									
1	HS	HU804	Principles of Management	2	0	0	2		
2	OE	IT801	A. Block Chain Technology	3	0	0	3		
			B. Big Data Analytics						
			C. Virtual Reality						
			D. Natural Language Processing						
3	OE	IT802	A. Bio-Informatics	3	0	0	3		
			B. Embedded System						
			C. Internet of Things (IoT)						
			D. Deep Learning						
4	OE	IT803	A. Data Sciences	3	0	0	3		
			B. Cyber Law and IPR						
			C. Cluster and Grid Computing						
			D. Entrepreneurship Development						
Total of Theory							11		
B. PRACTICAL									
5	PROJ	PR891	Project-VIII	0	0	9	9		
C. MANDATORY ACTIVITIES / COURSES									
6	MC	MC801	Essence of Indian Knowledge Tradition	3	0	0	3		
Total of Theory, Practical & Mandatory Activities/Courses							23		
Mandatory Credit Point=160									

For Honours Degree additional 20 Credit Point is to be earned (1st Sem to 8th Sem) through MOOCs courses. All the Certificates received by the students across all semester for MOOCs Courses from approved organization (Appendix A) is to be submitted to the Office of the Controller of Examination prior to 8th Semester Examination and the Credit earned through MOOCs courses will be reflected in their Results.

Credit Distribution Ratio:

Category	Credit Allocation As per Autonomy	Credit Allocation As per AICTE
Humanities, Social Sciences & Management Courses	9	12*
Basic Sciences Courses	25.5	25*
Engineering Sciences Courses including Workshop, Drawing, Basics of Electrical/Mechanical/Computer etc	24	24*
Professional Core Courses	52.5	48*
Professional Elective Courses relevant to chosen specialization/Branch	16.5	18*
Open Elective Courses-Electives from other technical and / or emerging subjects	15	18*
Project work, seminar and internship in industry or elsewhere	17.5	15*
Mandatory Courses [Environmental Science, Induction Training, Indian Constitution, Essence of Indian Knowledge Tradition and other Co & extracurricular activities		Non-credited
Total	160	160

* Minor Variation is allowed as per need of the respective disciplines.

A range of credits from 150 to 160 for a student to be eligible to get Under Graduate degree in Engineering.

Annexure-6

Department of Applied Electronics and Instrumentation Engineering

R-18 Curriculum & Syllabus (1st to 8th Semester)

(to be effective from 2018-19 admission batch)

Revised Curriculum Structure

(to be effective from 2018-19 admission batch)

Department: Applied Electronics & Instrumentation Engineering

Curriculum for B. Tech

Under Autonomy (GR A: ECE, EE, EIE, BME; GR B: CSE, IT, ME, CE, FT)

1st Semester								
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M 101	Mathematics -I	3	1	0	4	4
2	BS	CH 101/ PH 101	Chemistry (Gr. A) / Physics- I (Gr. B)	3	0	0	3	3
3	ES	EE 101/ EC 101	Basic Electrical Engineering (Gr. A) / Basic Electronics Engineering (Gr. B)	3	0	0	3	3
4	HS	HU 101	English	2	0	0	2	2
Total of Theory							12	12
B. PRACTICAL								
5	BS	CH 191/ PH191	Chemistry Lab (Gr. A) / Physics- I Lab (Gr. B)	0	0	3	3	1.5
6	ES	EE 191/ EC 191	Basic Electrical Engineering Lab (Gr. A) / Basic Electronics Engineering Lab (Gr. B)	0	0	3	3	1.5
7	ES	ME 191/ ME 192	Engineering Graphics & Design (Gr A) / Workshop/Manufacturing Practices (Gr-B)	0	0	3	3	1.5
8	PROJ	PR 191	PROJECT-IA	0	0	1	1	0.5
9	PROJ	PR 192	PROJECT-IB	0	0	1	1	0.5
C. MANDATORY ACTIVITIES / COURSES								
10	MC	MC 181	Induction Program	0	0	0	0	
Total of Theory, Practical & Mandatory Activities/Courses							23	17.5

Sl No	Course Code	Paper Code	Theory	2nd Semester			
				L	T	P	Credit Points
A. THEORY							
1	BS	M 201	Mathematics -II	3	1	0	4 4
2	BS	CH 201/ PH 201	Chemistry - (Gr. B) / Physics – I (Gr. A)	3	0	0	3 3
3	ES	EE 201/ EC 201	Basic Electrical Engineering (Gr. B) / Basic Electronics Engineering (Gr. A)	3	0	0	3 3
4	ES	CS 201	Programming for Problem Solving	3	0	0	3 3
5	ES	ME 201	Engineering Mechanics	3	0	0	3 3
Total of Theory							16 16
B. PRACTICAL							
6	ES	CS291	Programming for Problem Solving Lab	0	0	3	3 1.5
7	BS	CH 291/ PH 291	Chemistry Lab (Gr. B) / Physics - I Lab (Gr. A)	0	0	3	3 1.5
8	ES	EE 291/ EC 291	Basic Electrical Engineering Lab (Gr. B) / Basic Electronics Engineering Lab (Gr. A)	0	0	3	3 1.5
9	ES	ME 291/ ME 292	Engineering Graphics & Design (Gr B) / Workshop/Manufacturing Practice (Gr-A)	0	0	3	3 1.5
10	HS	HU 291	Language Lab	0	0	2	2 1
11	PROJ	PR 291	Project-II	0	0	1	1 0.5
12	PROJ*	PR 292	Innovative activities-I	0	0	0	0 0.5
C. MANDATORY ACTIVITIES / COURSES							
13	MC	MC 281	NSS/ Physical Activities/Meditation & Yoga/Photography/ Nature Club	0	0	0	3
Total of Theory, Practical & Mandatory Activities/Courses							34 24.0

* Inter/ Intra Institutional Activities viz; Training with higher Institutions; Soft skill training organized by Training and Placement Cell of the respective institutions; contribution at incubation/ innovation /entrepreneurship cell of the institute; participation in conferences/ workshops/ competitions etc.; Learning at Departmental Lab/ Tinkering Lab/ Institutional workshop; Working in all the activities of Institute's Innovation Council for eg: IPR workshop/Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc. (evaluation by Programme Head through certification)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

3 rd Semester								
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points
				L	T	P	Total	
A. THEORY								
1	BS	M 301	Mathematics – III	3	1	0	4	4
2	PC	EI 301	Analog Electronic Circuits	3	0	0	3	3
3	PC	EI 302	Digital Electronic Circuits	3	0	0	3	3
4	ES	EI 303	Circuit Theory and Networks	3	1	0	4	4
5	PC	EI 304	Electrical & Electronic Measurement & Instrumentation	3	0	0	3	3
Total of Theory							17	17
B. PRACTICAL								
6	PC	EI 391	Analog Electronic Circuits Lab	0	0	3	3	1.5
7	PC	EI 392	Digital Electronic Circuits Lab	0	0	3	3	1.5
8	ES	EI 393	Circuits Theory and Networks Lab	0	0	3	3	1.5
9	PC	EI394	Electrical & Electronic Measurement & Instrumentation Lab	0	0	3	3	1.5
10	PROJ	PR 391	Project-III	0	0	2	2	1
11	PROJ*	PR 392	Innovative activities-II	0	0	0	0	0.5
C. MANDATORY ACTIVITIES / COURSES								
12	MC 381	MC	Behavioral & Interpersonal skills	0	0	3	3	
Total of Theory, Practical & Mandatory Activities/Courses							35	24.5

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

4 TH SEMESTER							
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points
				L	T	P	
A. THEORY							
1	BS	PH 401	Physics – II	3	0	0	3
2	PC	EI 401	Sensors and Transducers	3	0	0	3
3	PC	EI 402	Microprocessors and Microcontrollers	3	0	0	3
4	PC	EI403	Digital Signal Processing	3	0	0	3
5	PC	EI 404	Electromagnetic Theory and Transmission Line	3	0	0	3
Total of Theory							15
B. PRACTICAL							
6	BS	PH 491	Physics –II Lab	0	0	3	3
7	PC	EI 491	Sensors and Transducers Lab	0	0	3	3
8	PC	EI 492	Microprocessor and Microcontrollers Lab	0	0	3	3
9	PC	EI493	Digital Signal Processing Lab	0	0	3	3
10	PROJ	PR 491	Project-IV	0	0	2	2
11	PROJ*	PR 492	Innovative activities-III	0	0	0	0
C. MANDATORY ACTIVITIES / COURSES							
10	MC	MC 401	Environmental Science	3	0	0	3
Total of Theory, Practical & Mandatory Activities/Courses							32
							22.5

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

5 th Semester								
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week			Credit Points	
				L	T	P		
A. THEORY								
1	HS	HU502	Economics for Engineers	2	0	0	2	
2	PC	EI 501	Industrial Instrumentation	3	0	0	3	
3	PC	EI 502	Analog & Digital Communication Theory	3	0	0	3	
4	PC	EI 503	Control Engineering	3	1	0	4	
5	PE	EI 504A	Optoelectronics & Fibre Optic Sensors	3	0	0	3	
		EI 504B	Soft Computing					
		EI 504C	IoT based Instrumentation System					
Total of Theory							15	
B. PRACTICAL								
6	PC	EI 591	Industrial Instrumentation Lab	0	0	3	3	
7	PC	EI 592	Analog & Digital Communication Lab	0	0	3	3	
8	PC	EI 593	Control Engineering Lab	0	0	3	3	
9	PROJ	PR 591	Project-V	0	0	2	2	
10	PROJ*	PR 592	Innovative activities-IV	0	0	0	0.5	
C. MANDATORY ACTIVITIES / COURSES								
10	MC	MC 501	Constitution of India	3	0	0	3	
Total of Theory, Practical & Mandatory Activities/Courses							29	
							21	

* Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

1	PC	EI 601	Process Control-I	3	0	0	3	3		
2	PE	EI 602	A. Bio Medical Instrumentation	3	0	0	3	3		
			B. Advance Sensors							
			C. Non Destructive Testing & Ultrasonic Instrumentation							
3	PE	EI 603	A. Analytical Instrumentation	3	0	0	3	3		
			B. Non-Conventional Energy Sources							
			C. Artificial Intelligence							
4	OE	EI 604	A. Power Electronics	3	0	0	3	3		
			B. Industrial Drives							
			C. Robotics Engineering							
5	OE	EI 605	A. Data Structures & Algorithms	3	0	0	3	3		
			B. Database Management System							
			C. Software Engineering							
Total of Theory							15	15		
B. PRACTICAL										
6	PC	EI 691	Process Control Lab	0	0	3	3	1.5		
7	OE	EI 692	A. Power Electronics Lab	0	0	3	3	1.5		
			B. Industrial Drives Lab							
			C. Robotics Engineering Lab							
8	OE	EI 693	A. Data Structures & Algorithms Lab	0	0	3	3	1.5		
			B. Database Management System Lab							
			C. Software Engineering Lab							
10	PROJ	PR 691	Project-VI	0	0	2	2	1		
11	PROJ*	PR 692	Innovative activities-V	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
12	MC	MC 681	Technical Presentation & Group Discussion-I	0	0	3	3			
Total of Theory, Practical & Mandatory Activities/Courses							29	21		

*Students may choose either to work on participation in all the activities of Institute's Innovation Council for eg: IPR workshop/ Leadership Talks/ Idea/ Design/ Innovation/ Business Completion/ Technical Expos etc.

Innovative activities to be evaluated by the Programme Head/ Event coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

7 th Semester										
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week				Credit Points		
				L	T	P	Total			
A. THEORY										
1	HS	HU701	Values & Ethics in Profession	2	0	0	2	2		
2	PC	EI 701	Telemetry and Remote Control	3	0	0	3	3		
3	PE	EI 702	A. Process Control-II	3	0	0	3	3		
			B. Power Plant Instrumentation							
			C. Plant Automation							
4	OE	EI 703	A. Computer Networking	3	0	0	3	3		
			B. Computer graphics and Multimedia							
			C. Object Oriented Programming							
Total of Theory							11	11		
B. PRACTICAL										
5	PC	EI 791	Telemetry and Remote Control Lab	0	0	3	3	1.5		
6	OE	EI 792	A. Computer Networking Lab	0	0	2	2	1		
			B. Multimedia Lab							
			C. Object Oriented Programming Lab							
7	PROJ	PR 791	Project-VII	0	0	0	6	3		
8	PROJ*	PR 792	Innovative activities-VI	0	0	0	0	0.5		
C. MANDATORY ACTIVITIES / COURSES										
9	MC	MC 781	Technical Presentation & Group Discussion-II	0	0	3	3			
Total of Theory, Practical & Mandatory Activities/Courses							25	17		

*Students may choose either to work on participation in Hackathons etc. Development of new product/ Business Plan/ registration of start-up.

Students may choose to undergo Internship / Innovation / Entrepreneurship related activities. Students may choose either to work on innovation or entrepreneurial activities resulting in start-up or undergo internship with industry/ NGO's/ Government organizations/ Micro/ Small/ Medium enterprises to make themselves ready for the industry/ Long Term goals under rural Internship. (Duration 4-6 weeks)

Innovative activities to be evaluated by the Programme Head / Event Coordinator based on the viva voce and submission of necessary certificates as evidence of activities.

8 th Semester										
Sl No	Course Code	Paper Code	Theory	Contact Hours /Week		Credit Points				
				L	T					
A. THEORY										
1	HU	HU 804	Principles of Management	2	0	0	2	2		
2	PE	EI 801	A. Virtual Instrumentation	3	0	0	3	3		
			B. Embedded System Design							
			C. Mechatronics							
3	OE	EI 802	A. Mobile Communication	3	0	0	3	3		
			B. VLSI & Microelectronics							
			C. Quantum Computing							
Total of Theory							8	8		
B. PRACTICAL										
4	PE	EI 891	A. Virtual Instrumentation Lab	0	0	3	3	1.5		
			B. Embedded System Design Lab							
			C. Mechatronics Lab							
5	PROJ	PR 891	Project-VIII	0	0	0	6	3		
C. MANDATORY ACTIVITIES / COURSES										
6	MC	MC 801	Essence of Indian Knowledge Tradition	3	0	0	3	0		
Total of Theory, Practical & Mandatory Activities/Courses							20	12.5		

Mandatory Credit Point=160

For Honors additional 20 Credit Point is to be earned (1st Sem to 8th Sem) through MOOCs courses. All the Certificates received by the students across all semester for MOOCs Courses from approved organization (Listed by AICTE / MAKAUT) is to be submitted to CoE office prior to 8th Semester Examination.

Credit Distribution Ratio:

Category	Credit Allocation As per Autonomy	Credit Allocation As per AICTE
Humanities, Social Sciences & Management Courses	9	12*
Basic Sciences Courses	25.5	25*
Engineering Sciences Courses including Workshop, Drawing, Basics of Electrical/Mechanical/Computer etc	25	24*
Professional Core Courses	53.5	48*
Professional Elective Courses relevant to chosen specialization/Branch	16.5	18*
Open Elective Courses-Electives from other technical and / or emerging subjects	16	18*
Project work, seminar and internship in industry or elsewhere	14.5	15*
Mandatory Courses [Environmental Science, Induction Training, Indian Constitution, Essence of Indian Knowledge Tradition and other Co & extracurricular activities		Non-credited
Total	160	160

Minor Variation is allowed as per need of the respective disciplines.

R18 B. Tech AEIE, 8th Semester

Annexure-7

Course Structure

&

Syllabus

for

Master of Computer Applications (MCA)

Regulation – 20

(Under Autonomy)

GURU NANAK INSTITUTE OF TECHNOLOGY
157/F, Nilgunj Road, Sodepur, Kolkata-114

Affiliated to -

**Maulana Abul Kalam Azad University of
Technology (Formerly known as WBUT)**

Program Structure

SEMESTER	THEORY		PRACTICAL		SESSIONAL		Semester Credits [A+B+C]
	Courses	Credits [A]	Courses	Credits [B]	Courses	Credits [C]	
I	4(C) + 1(E)	19	3	6	-	-	25
II	4(C) + 1(E)	19	3	6	-	-	25
III	3(C) + 2(E)	18	1	2	1	5	25
IV	1(O)	3	-	-	2	22	25
TOTAL CREDIT→							100

* C → Compulsory Courses

* E → Elective Courses

* O → Open Elective Courses

CURRICULUM

Semester – I

Sl. No.	Course Code	Course Name	Contact Hours / Week				Credit
			L	T	P	Total	
THEORY							
1	MCA20-101	Programming in Python	3	1	-	4	4
2	MCA20-102	Relational Database Management Systems	3	1	-	4	4
3	MCA20-103	Computer Organization and Architecture	3	1	-	4	4
4	MCA20-104	Discrete Mathematics and Graph Theory	3	1	-	4	4
5	Elective I		3	-	-	3	3
	MCA20-E105A	Environment and Ecology					
	MCA20-E105B	Management and Accountancy					
	MCA20-E105C	Constitution of India					
	MCA20-E105D	Stress Management through Yoga					
	MCA20-E105E	Values and Ethics in Profession					
	MCA20-E105F	Managerial Economics					
PRACTICAL							
1	MCA20-190	Soft Skills and Interpersonal Development	-	-	4	4	2
2	MCA20-191	Python Programming Lab	-	-	4	4	2
3	MCA20-192	Relational Database Management Systems Lab	-	-	4	4	2
		Total Weekly Contact Hours and Credit				31	25

CURRICULUM

Semester – II

Sl. No.	Course Code	Course Name	Contact Hours / Week				Credit
			L	T	P	Total	
THEORY							
1	MCA20-201	Data Structures	3	1	-	4	4
2	MCA20-202	Operating Systems	3	1	-	4	4
3	MCA20-203	Object Oriented Programming with JAVA	3	1	-	4	4
4	MCA20-204	Data Communication & Computer Networks	3	1	-	4	4
5	Elective II		3	-	-	3	3
	MCA20-E205A	Numerical and Statistical Analysis					
	MCA20-E205B	Computer Graphics					
	MCA20-E205C	Probability and Statistics					
	MCA20-E205D	Introduction to Cyber Security					
	MCA20-E205E	Introduction to Internet of Things (IoT)					
	MCA20-E205F	Automata Theory & Computational Complexity					
PRACTICAL							
1	MCA20-291	Data Structures Lab	-	-	4	4	2
2	MCA20-292	Operating Systems Lab (Unix)	-	-	4	4	2
3	MCA20-293	Object Oriented Programming Lab using JAVA	-	-	4	4	2
		Total Weekly Contact Hours and Credit					31
							25

CURRICULUM							
Semester – III							
Sl. No.	Course Code	Course Name	Contact Hours / Week			Credit	
			L	T	P		
THEORY							
1	MCA20-301	Software Engineering	3	1	-	4	4
2	MCA20-302	Artificial Intelligence	3	1	-	4	4
3	MCA20-303	Design and Analysis of Algorithms	3	1	-	4	4
4	Elective III		3	-	-	3	3
	MCA20-E304A	Image Processing					
	MCA20-E304B	Web Enabled JAVA Programming					
	MCA20-E304C	Cloud Computing					
	MCA20-E304D	Web Technology					
	MCA20-E304E	Android Application Development					
	MCA20-E304F	Basic Data Science					
5	Elective IV		3	-	-	3	3
	MCA20-E305A	Information Retrieval					
	MCA20-E305B	Data Warehousing and Data Mining					
	MCA20-E305C	Introduction to Big Data Analytics					
	MCA20-E305D	Cryptography					
	MCA20-E305E	Operations Research and Optimization Techniques					
	MCA20-E305F	Pattern Recognition					
	MCA20-E305G	Machine Learning					
PRACTICAL							
1	MCA20-E394 (A/B/C/D/E/F)	Elective III Lab	-	-	4	4	2
SESSIONAL							
1	MCA20-381	Minor Project and Viva-voce	-	-	8	8	5
		Total Weekly Contact Hours and Credit				30	25

CURRICULUM

Semester – IV

Sl. No.	Course Code	Course Name	Contact Hours / Week				Credit
			L	T	P	Total	
THEORY							
1	Open Elective *+		-	-	-	-	3
	MCA20-O401A	Business Analytics					
	MCA20-O401B	Robotics					
	MCA20-O401C	Bioinformatics					
	MCA20-O401D	Information Theory & Coding					
	MCA20-O401E	Automation in VLSI Design					
	MCA20-O401F	Intelligent Control					
	MCA20-O401G	Design of Embedded Systems					
	MCA20-O401H	Machine Learning					
	MCA20-O401I	Soft Computing					
	MCA20-O401J	Information Retrieval					
	MCA20-O401K	Multimedia					
	MCA20-O401L	Distributed System					
	MCA20-O401M	Big Data Analytics					
	MCA20-O401N	Cryptography					
	MCA20-O401O	Social Networks					
	<p>*While opting for a domain for pursuing the Open Elective course, a student needs to ensure that the domain was not covered in previous semesters of the program.</p> <p>+ will abide by the rules of MAKAUT</p>						
SESSIONAL							
1	MCA20-481	Grand Viva	-	-	-	-	2
2	MCA20-482	Major Project and Viva-voce	-	-	28	28	20
		Total Weekly Contact Hours and Credit				28	25

Annexure-8

Maulana Abul Kalam Azad University of Technology, West Bengal
3 Years UG BBA in Hospital Management CBCS Structure

SEM-1

SEM-2

SEM-3

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	CC	BBA(HM) 301	Medical Record Science	5	1		6
2.		BBA(HM) 302	Health Care Marketing	5	1		6
3.		BBA(HM) 303	Health Information Systems	5	1		6
4.	GE	BBA(HM) 304	Laws and Ethics	5	1		6
5.	SEC	BBA (HM) 305	Computer Applications			2	2

SEM-4

SEM-5

SEM-6

Annexure-9

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BCA (Draft Syllabus)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System

Curriculum Structure

L T P - Indicates Theory Lectures (L), Tutorial(T) and Practical (P) classes per week.

1L Earns 1 credits

1P Earns 0.5 credits

1T Earns 1 Credit

Semester I							
Sl. No.	Category	Course Code	Course Name	L	T	P	Credits
Theory + Practical							
1	CC1	BCAC101 BCAC191	Programming for Problem Solving	4	0	4	6
2	CC2	BCAC102 BCAC192	Digital Electronics	4	0	4	6
3	AEC-1	BCAA101	Soft Skills	2	0	0	2
4	GE-1		Any one from GE basket.	4 / 5	0 / 1	4 / 0	6
				Total Credit			20

Semester II							
Sl. No.	Category	Course Code	Course Name	L	T	P	Credits
Theory + Practical							
1	CC3	BCAC201	Discrete Structures	5	1	0	6
2	CC4	BCAC202 BCAC292	Computer Architecture	4	0	4	4+2
3	AECC-2	BCAA201	Environmental Science	2	0	0	2
4	GE-2		Any one from GE basket.	4 / 5	0 / 1	4 / 0	6
				Total Credit			20

Annexure-10

WEST BENGAL STATE COUNCIL OF TECHNICAL & VOCATIONAL EDUCATION AND SKILL DEVELOPMENT

WBSCTVESD Curriculum for Diploma Courses in Engineering and Technology

Semester I
(Common to all Branches)

Sl. No	Category of Course	Course Title	Hours per week			Total contact hrs/ week	Credi ts	Marks
			L	T	P			
1.	Basic Science	Mathematics-I	2	1	0	3	3	100
2.	Basic Science	Applied Physics-I	2	1	0	3	3	100
3.	Basic Science	Applied Chemistry	2	1	0	3	3	100
4.	Humanities & Social Science	Communication Skills in English	2	0	0	2	2	100
5.	Engineering Science	Engineering Graphics	0	0	3	3	1.5	100
6.	Engineering Science	Engineering Workshop Practice	0	0	3	3	1.5	100
7.	Basic Science	Applied Physics-I Lab	0	0	2	2	1	100
8.	Basic Science	Applied Chemistry Lab	0	0	2	2	1	100
9.	Humanities & Social Science	Sports and Yoga	0	0	2	2	1	100
10.	Humanities & Social Science	Communication Skills in English Lab	0	0	2	2	1	100
Total Credits and Marks							18	1000

Semester II Revised curriculum yet not received from Council

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION				
TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES				
COURSE NAME: All Branches except Architecture, Photography, Multi media and Printing Technology				
DURATION OF COURSE: 6 SEMESTERS				
SEMESTER: SECOND				
BRANCH: Common for all branches except Architecture, Photography, Multi Media and Printing Technology				
			PERIODS	EVALUATION SCHEME

SR. NO.	SUBJEC T	CREDI TS	L	TU	PR	INTERNAL SCHEME			ESE	PR	Total Marks
						TA	CT	Total			
1	Business Economics & Accountancy	3	4	-	-	10	20	30	70	-	100
2	Applied Physics	3	2	-	2	5	10	15	35	50	100
3	Applied Chemistry	3	2	-	2	5	10	15	35	50	100
4	Engineering Mathematics	4	3	1	-	10	20	30	70	-	100
5	Strength of Materials	2	2	1	-	5	10	15	35	-	50
6	Electrical Technology	2	2	1	-	5	10	15	35	-	50
7	Engineering Drawing	3	1	-	3	5	10	15	35	100	150
8	Workshop Practice-II	2	-	-	3	-	-	-	-	100	100
9	Development of Life Skill -I	3	1	-	3	-	-	-	-	50	50
Total:		25	17	3	13	45	90	135	315	350	800
STUDENT CONTACT HOURS PER WEEK:33 hrs											
Theory and Practical Period of 60 Minutes each.											
L- Lecture, TU- Tutorials, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam.											

Semester III

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA COURSES											
COURSE NAME: ELECTRICAL ENGINEERING											
COURSE CODE : EE											
DURATION OF COURSE : 6 SEMESTER											SEMESTER: THIRD SEMESTER
SCHEME : C											SEMESTER: THIRD SEMESTER
Sr. No	SUBJECT	PERIODS			EVALUATION SCHEME						Credit s
	THEORY	L	T	P	SESSIONSAL EXAM			ESE	PR(I NT.)	PR (E X T.)	
					TA	CT	Total				
1	Electrical Circuit & Network	03	01	02	10	20	30	70	25	25	5
2	Electrical Machine I	03		03	10	20	30	70	25	50	5
3	Basic Electronics	03	--	02	10	20	30	70	25	25	4
4	Programming concept using C	02	--	02	5	10	15	35			3
5	Electrical Measuring Instrument	03	--	02	10	20	30	70	25	25	4
6	Electrical Workshop I	--	--	02	--	--	--	--	25	25	1

7	Elements of Mechanical Engineering	02			5	10	15	35					2
8	Professional Practices I	--	--	02	--	--	--	--	50				1
	Total	16	01	15	50	100	150	350	175	150			2 5

STUDENT CONTACT HOURS PER WEEK: 32

THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH

ABBREVIATIONS: CT- Class Test, TA - Teachers Assessment, L - Lecture, T - Tutorial, PR (INT.) – Practical (Internal) PR(EXT.)- Practical(External), ESE - End Semester Exam.

TA: Attendance & surprise quizzes = 6 marks. Assignment & Group Discussion = 4 marks.

Total Marks : 825

Minimum passing for sessional marks is 40%, and for theory subject 40%.

Semester IV

W.B.S.C .T.E. TEACHING AND EXAMINATION SCHEME FOR DIPLOMA COURSES													
COURSE NAME: ELECTRICAL ENGINEERING													
COURSE CODE : EE													
DURATION OF COURSE : 6 SEMESTERS													SCHEME : C
Sr.No	SUBJECT	PERIODS			EVALUATION SCHEME								Credits
	THEORY	L	T	P	SESSIONSAL EXAM			ESE	PR(I NT.)	PR (EX T.)			
		T A	CT	Total									
1	Electrical Machine II	03		03	10	20	30	70	25	50			5
2	Electrical Measurement & Control	03	--	02	10	20	30	70	25	25			4
3	Transmission & Distribution of Power	03	-	02	10	20	30	70	25	25			4
4	Applied and Digital Electronics	03	--	02	10	20	30	70	25	25			4
5	Power Plant	04	--		10	20	30	70					4

	Engineering												
6	Computer aided Electrical Drawing		--	03	--	--	--	--	25	25			2
7.	Development of Life Skill -II		01	--	02				25	25			2
8.	Professional Practice - II				02				50				1
Total		17		16	50	100	150	350	200	175			26
STUDENT CONTACT HOURS PER WEEK: 33 HRS THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH													
ABBREVIATIONS: CT - Class Test, TA - Teachers Assessment, L - Lecture, T - Tutorial, PR (INT.) - Practical (Internal) PR(EXT.) - Practical(External), ESE - End Semester Exam.													
TA: Attendance & surprise quizzes = 6 marks. Assignment & group discussion = 4 marks. Total Marks : 875 Minimum passing for sessional marks is 40%, and for theory subject 40%.													

Semester V

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA COURSES															
COURSE NAME: ELECTRICAL ENGINEERING															
COURSE CODE : EE															
DURATION OF COURSE : 6 SEMESTERS															
SEMESTER: FIFTH SEMESTER										SCHEME : C					
Sr.No	SUBJECT	PERIODS			EVALUATION SCHEME							Credits			
	THEORY	L	T	P	SESSIONSAL EXAM			PR(I NT.)	PR (EX T.)						
					TA	CT	Total								
1	Power Electronics and Drives	03		02	10	20	30	70	25	25			4		
2	Micoprocessor & Microcontroller	03	--	02	10	20	30	70	25	25			4		
3	Switchgear & Protection	03		02	10	20	30	70	25	50			4		

4	Industrial Project & Entrepreneurs hip Development	01	--	03					25	50		3
5	Utilization, Traction , Heating and drives	03		02	10	20	30	70	25	25		4
6	Elective I (Any One)	03	--	02	10	20	30	70	25	25		4
	Illumination Engineering											
	Heating , Ventilation and Air conditionin g											
	Energy Conservati on & Audit											
	Electric Traction											
7	Professional Practice -III			03						25	25	2
Total		16		16	50	100	150	350	175	225		25

STUDENT CONTACT HOURS PER WEEK: 32 HRS

THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH

ABBREVIATIONS: CT- Class Test, TA - Teachers Assessment, L - Lecture, T - Tutorial, PR (INT.) – Practical (Internal) PR(EXT.)- Practical(External), ESE - End Semester Exam

TA: Attendance & surprise quizzes = 6 marks. Assignment & group discussion = 4 marks.

Total Marks : 900

Minimum passing for sessional marks is 40%, and for theory subject 40%.

SEMESTER VI

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA COURSES	
COURSE NAME:	ELECTRICAL ENGINEERING
COURSE CODE :	EE
DURATION OF COURSE :	6 SEMESTERS
SEMESTER:	SIXTH SEMESTER
	SCHEME : C

Sr. No	SUBJECT	PERIODS			EVALUATION SCHEME						Credit s	
		THEORY				SESSIONSAL EXAM			PR(I NT.)	PR (EX T.)		
			L	T	P	TA	CT	Total	ESE			
1	Electrical Design Estimation & Costing	04		03		10	20	30	70	25	25	5
2	Electrical Installation , Maintenance , Testing	04				10	20	30	70			4
3	Industrial Project			05						50	50	3
4.	Electrical Workshop II			03						25	25	1
4	Industrial Management	03				10	20	30	70			3
5	Elective II (Any One)	03	--	03		10	20	30	70	25	25	4
	Industrial Automation											
	Process Control											
	Control of Electrical Machine											
	Computer Hardware & Networking											
6	Professional Practice -IV			04						50		2
7	General Viva voce									100		2

Total	14		18	40	80	120	280	275	125		24
-------	----	--	----	----	----	-----	-----	-----	-----	--	----

STUDENT CONTACT HOURS PER WEEK: 32 HRS

THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH

ABBREVIATIONS: CT- Class Test, TA - Teachers Assessment, L - Lecture, T - Tutorial, PR (INT.) – Practical (Internal) PR(EXT.)- Practical(External), ESE - End Semester Exam.

TA: Attendance & surprise quizzes = 6 marks. Assignment & group discussion = 4 marks.

Total Marks : 800

Minimum passing for sessional marks is 40%, and for theory subject 40%.

Annexure-11

CURRICULAR STRUCTURE OF THREE YEARS FULL-TIME DIPLOMA COURSE IN ELECTRONICS AND TELE COMMUNICATION ENGINEERING



WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION

(A Statutory Body under West Bengal Act XXI of 1995) "Kolkata Karigori Bhavan", 2nd Floor, 110 S. N. Banerjee Road,
Kolkata – 700013

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION												
TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES												
COURSE NAME: FULL TIME DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING												
DURATION OF COURSE: 6 SEMESTERS												
SEMESTER: FOURTH												
BRANCH: ELECTRONICS & TELECOMMUNICATION ENGINEERING												
SR. NO.	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	PR	@TW	Total Marks
1.	Elementary Communication Engineering	4	4	1	-	10	20	30				
2.	Analog Electronics -II	3	4	-	-	10	20	30	70	-	-	100
3.	Consumer Electronics	3	3	-	-	10	20	30	70	-	-	100
4.	Microprocessor	3	4	-	-	10	20	30	70	-	-	100
5.	Elementary Communication Engineering Laboratory	2	-	-	3	-	-	-	-	75	-	75
6.	Analog Electronics-II Laboratory	2	-	-	3	-	-	-	-	75	-	75
7.	Consumer Electronics Laboratory	2	-	-	2	-	-	-	-	75	-	75
8.	Microprocessor Lab	2	-	-	3	-	-	-	-	75	-	75
9.	Development of Life Skill-II Laboratory	2	-	-	2	-	-	-	-	50	-	50
10.	Professional Practice – II	2	1	-	3	-	-	-	-	-	50	50
	Total	25	16	1	16	40	80	120	280	350	50	800

STUDENT CONTACT HOURS PER WEEK: 33 hrs, (Teaching-15 weeks + Internal Exam-2 weeks)

THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH

ABBREVIATIONS: L- Lecture, TU- Tutorials, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam, TW- Team Work

TA (Teacher's assessment) = 10 marks: Attendance & surprise quizzes = 5 marks and Assignment & group discussion = 5 marks for CT= 20 Marks.

TA (Teacher's assessment) = 5 marks: Attendance & surprise quizzes + Assignment & group discussion = 5 marks for CT = 10 Marks.

Total Marks : 800

Minimum passing for Sessional marks is 40%, and for theory subject 40%.

Assessment of Practical, Oral & Term Work to be done as per the prevailing norms of curriculum implementation & assessment.

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION												
TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES												
COURSE NAME: FULL TIME DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING												
DURATION OF COURSE: 6 SEMESTERS												
SEMESTER: FIFTH												
BRANCH: ELECTRONICS & TELECOMMUNICATION ENGINEERING												
SR. NO.	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	PR	@TW	Total Marks
						TA	CT	Total				
1.	Digital and Microwave Communication Engg.	3	4	1	-	10	20	30	70	-	-	100
2.	Electronics Measurement	3	3	-	-	10	20	30	70	-	-	100
3.	Industrial Electronics-I	2	2	1	-	5	10	15	35	-	-	50
4.	Microcontroller & Embedded System	3	3	-	-	10	20	30	70	-	-	100
5.	<u>Elective-I (Select any one)</u> Computer Network-I Medical Electronics-I Digital Signal Processing-I Computer Hardware Maintenance-I	2	2	-	-	5	10	15	35	-	-	50
6.	Digital and Microwave Communication Engg. Laboratory	2	-	-	3	-	-	-	-	75	-	75
7.	Electronics Measurement Laboratory	1	-	-	2	-	-	-	-	75	-	75
8.	Industrial Electronics-I Laboratory	2	-	-	2	-	-	-	-	75	-	75
9.	Microcontroller and Embedded system Lab	2	-	-	2	-	-	-	-	75	-	75
10.	Elective- I Laboratory	1	-	-	2	-	-	-	-	50	-	50
11.	Industrial Project & Entrepreneurship Development	3	1	-	2	-	-	-	-	100	-	100
12.	Professional Practice – III	1	-	-	3	-	-	-	-	-	50	50
	Total	25	15	2	16	40	80	120	280	450	50	900

STUDENT CONTACT HOURS PER WEEK:33 hrs, (Teaching-15 weeks + Internal Exam-2 weeks)

THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH

ABBREVIATIONS: L- Lecture, TU- Tutorials, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam, TW-Term Work,

TA (Teacher's assessment) = 10 marks: Attendance & surprise quizzes = 5 marks and Assignment & group discussion = 5 marks for CT= 20 Marks.

TA (Teacher's assessment) = 5 marks: Attendance & surprise quizzes + Assignment & group discussion = 5 marks for CT = 10 Marks.

Total Marks : 900

Minimum passing for Sessional marks is 40%, and for theory subject 40%.

Assessment of Practical, Oral & term work to be done as per the prevailing norms of curriculum implementation & assessment.

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES

COURSE NAME: FULL TIME DIPLOMA IN ELECTRONICS & TELECOMMUNICATION ENGINEERING

DURATION OF COURSE: 6 SEMESTERS

SEMESTER: SIXTH

BRANCH: ELECTRONICS & TELECOMMUNICATION ENGINEERING

SR. NO.	SUBJECT	CREDIT S	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	PR	@TW	Total Marks
						TA	CT	Total				
1.	Industrial Management	3	3	-	-	10	20	30	70	-		100
2.	Advance Communication Engineering	3	3	1	-	10	20	30	70	-	-	100
3.	Instrumentation & Control	3	3	1	-	10	20	30	70	-	-	100
4.	Industrial Electronics-II	3	3	-	-	10	20	30	70	-	-	100
5.	<u>Elective-II (Select any one)</u> Computer Network-II Medical Electronics-II Digital Signal Processing-II Computer Hardware Maintenance-II	2	2	-	-	5	10	15	35	-	-	50
6.	Communication Engineering Laboratory-III	2	-	-	3	-	-	-	-	50	-	50
7.	Instrumentation & Control Laboratory	1	-	-	2	-	-	-	-	50	-	50
8.	Industrial Electronics Laboratory-II	2	-	-	3	-	-	-	-	50	-	50
9.	Elective- II Laboratory	1	-	-	2	-	-	-	-	50	-	50
10.	Industrial Project	2	-	-	4	-	-	-	-	100	-	100
11.	Professional Practice – IV	2	-	-	3	-	-	-	-	-	50	50
12.	General Viva voce	2	-	-	-	-	-	-	-	-	100	100
	Total	26	14	2	17	45	90	135	315	300	150	900

STUDENT CONTACT HOURS PER WEEK:33 hrs, (Teaching-15 weeks + Internal Exam-2 weeks)

THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH

ABBREVIATIONS: L- Lecture, TU- Tutorials, PR- Practical, TA- Teachers Assessment, CT- Class Test, ESE- End Semester Exam, TW-Term Work

TA (Teacher's assessment) = 10 marks: Attendance & surprise quizzes = 5 marks and Assignment & group discussion = 5 marks for CT= 20 Marks.

TA (Teacher's assessment) = 5 marks: Attendance & surprise quizzes + Assignment & group discussion = 5 marks for CT = 10 Marks.

Total Marks : 900

Minimum passing for Sessional marks is 40%, and for theory subject 40%.

Assessment of Practical, Oral & term work to be done as per the prevailing norms of curriculum implementation & assessment.

.

Some Companies who recruited our Students

Infosys

Capgemini
CONSULTING. TECHNOLOGY. OUTSOURCING

Cognizant

AXIS BANK

TATA
TATA CONSULTANCY SERVICES

SAP

WIPRO
Applying Thought

Pinnacle Infotech

amazon

Tech Mahindra

hp

HCL
CAREER DEVELOPMENT CENTRE

GENPACT
Global Business Impact™

YODLEE

IBM

airtel

Coca-Cola

ITC INFOTECH
Business-friendly Solutions

priya
The joy of good taste

IndiGo

Poornam Info vision

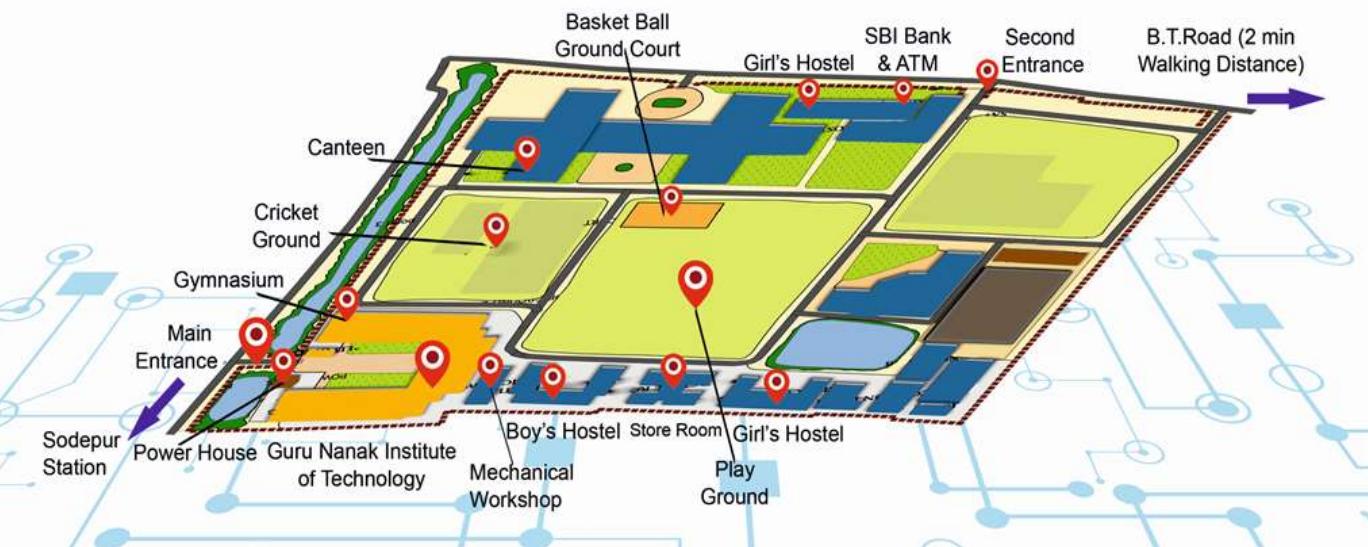
HDFC BANK

ERICSSON

BISK FARM

accenture
High performance. Delivered.

& many more...



GURU NANAK INSTITUTE OF TECHNOLOGY

157/F, Nilgunj Road, Sodepur, Kolkata-700114

Phone: +91-33-2523-3900 | Tel Fax: +91-33-2563-7957

www.gnit.ac.in email:info.gnit@jisgroup.org / admission.gnit@jisgroup.org

CAREER COUNSELING AND ADMISSION HELP LINE

Call at +91 9432012681/ +91 9073683911 or

Whatsapp at +91-0-9830474617

