



NIRMA
UNIVERSITY

INSTITUTE OF TECHNOLOGY

NAAC ACCREDITED 'A+' GRADE

2024-25
VOLUME II

BTech

STUDENTS' INFORMATION BOOKLET



प्रार्थना

या कुन्देन्दु तुषारहार धवला या शुभ्र वस्त्रावृता ।
या वीणा वर दण्ड मण्डितकरा या श्वेत पद्मासना ॥
या ब्रह्माच्युत शंकर प्रभृतिभिः देवैः सदा वन्दिता ।
सा मां पातु सरस्वती भगवती निःशेष जाड्यापहा ॥

श्लोक अर्थ - जो विद्या की देवी भगवती सरस्वती कुन्द के फूल, चन्द्रमा, हिमराशि और मती के हार की तरह धवल वर्ण की हैं और जो श्वेत वस्त्र धारण करती हैं, जिनके हाथ में वीणा-दण्ड शोभायमान है, जिन्होंने श्वेत कमलों पर आसन ग्रहण किया है तथा ब्रह्मा, विष्णु एवं शंकर आदि देवताओं द्वारा जो सदा पूजित हैं, वही सम्पूर्ण जड़ता और अज्ञान को दूर कर देने वाली माँ सरस्वती हमारी रक्षा करें ।

Meaning - Salutations to Devi Saraswati, Who is pure white like Jasmine, with the coolness of Moon, brightness of Snow and shine like the garland of Pearls; and Who is covered with pure white garments, Whose hands are adorned with Veena (a stringed musical instrument) and the boon-giving staff; and Who is seated on pure white Lotus, Who is always adored by Lord Brahma, Lord Acyuta (Lord Vishnu), Lord Shankara and other Devas, O Goddess Saraswati, please protect me and remove my ignorance completely.



PREAMBLE

The Handbook for students printed in two volumes (Volume–I and Volume –II) gives information about Nirma University, Institute of Technology and detailed information about the undergraduate BTech programmes.

Handbook Volume – I contains general information about the Nirma University and an insight about the general administration of the Institute of Technology. It gives important information about general rules to be followed by the students on the campus, discipline and conduct rules of the University. It also gives information about the academic infrastructure, teaching learning process, student-centric activities, general facilities and support available to the students on the campus.

Handbook Volume –II contains academic information of the Institute which includes the Academic Rules and Regulations regarding academic requirements and academic conduct of the students at the University including different policies and forms. Besides, it includes important information on registration, grading system, academic standards, attendance norms, discipline and the likes.

It is the responsibility of all the students to get themselves familiarized with the rules and regulations of the Institute and University.

The University / Institute reserves the right to amend the rules and regulations mentioned in the Handbook without any prior notice. The decision of the University shall be final on all the matters. For any further clarification, the Student Section may be contacted.

These Handbooks (Information Booklets) are for the purpose of providing information to the students about the University and its programmes and is not a Regulation book of the University.

Dr. Rajesh Patel

Director, School of Engineering

Dean, Faculty of Technology & Engineering

Institute of Technology, Nirma University

DEAN'S MESSAGE

With great pleasure, I welcome you to one of the most reputed institutes of the country; an institute with a firm vision of the overall development of students, a place that will enrich you with technical and life skills and will provide the opportunity to compete with world-class students. The University is accredited by NAAC with 'A+' grade in 2022 which endorses the quality standards followed in every aspect of education. It is also awarded the Centre of Excellence (CoE) status by the Government of Gujarat. All the BTech Programmes under the Institute are accredited by the National Board of Accreditation (NBA) under Tier-I category. The Institute of Technology received high rankings from ranking agencies. Since its inception in 1995, Institute of Technology, Nirma University has upheld its vision of shaping a better future for mankind by developing effective and socially responsible individuals and organizations. In a short span of time, the Institute is recognized as one of the leading Centre of higher education in the country. It is also known for the outstanding caliber of its students, well-qualified faculty dedicated to teaching and research and excellent infrastructure. Institute aims to provide a learning environment that promotes excellence in academic and professional standards. The Institute is equally responsible for sensitizing its students towards societal activities, environmental sustainability and equal opportunity to nurture.



We have implemented the National Education Policy 2020 from the Academic Year 2022-23 and onwards. NEP 2020 envisages that the existing curriculum and pedagogy shall be restructured in such a way to develop respect for the Fundamental Duties and Constitutional values, and conscious awareness of one's roles and responsibilities among the students and to inculcate the appreciation among the students regarding the knowledge, skills, values, and dispositions that support responsible commitment to human rights, sustainable development and living, and global well-being, thereby reflecting a truly global citizen.

The flexible curriculum will help students not only acquiring occupational skills, but also developing competences to deal with many situations and work in teams and a package of skills that enables one to deal with the various challenges of working life. The revised curriculum shall have more tutorials and laboratory sessions which will facilitate the greater interaction between the teachers and students. It also focuses on internships and field projects. Hence, the students have the opportunity to apply the skills, theories and concepts learned in the classroom to real problems. Keeping in mind the graduate skill set desired by the industry, the Institute focuses on the teaching-learning process, curricula and evaluation from lower-order thinking skills to higher-order skills. We at the institute impart experiential learning with a strong foundation of core courses with an interdisciplinary flavor along with supplementary courses aiming to hone thinking skills. The courses are designed and delivered in such a way that they add significant value to a student not only restricted to technology, but also core human values. The main focus of the institution is to empower students with sound knowledge, experience, and training so that they can achieve heights both at the academic level and highly competitive global industrial market respectively.

I once again welcome you, and wish you a bright success in your academic pursuit.

Dr Rajesh Patel

Director, School of Engineering
Dean, Faculty of Technology & Engineering
Institute of Technology, Nirma University

DIRECTOR'S MESSAGE

I extend a warm welcome to you as you consider joining Nirma University's School of Technology for our BTech and Integrated BTech (CSE)- MBA Programmes. At Nirma University, we believe in fostering holistic development, nurturing talent, and providing a conducive environment for academic excellence and personal growth.

Our BTech and Integrated BTech (CSE)-MBA Programmes are designed to equip you with a blend of technical expertise in field of computer engineering and managerial acumen, preparing you to thrive in the dynamic global business landscape. With a rigorous curriculum, experienced faculty, state-of-the-art facilities, and industry exposure, we strive to empower our students to become leaders and innovators in their chosen fields.



At Nirma University, we are committed to providing a transformative educational experience that goes beyond the classroom, encouraging innovation, entrepreneurship, and ethical leadership. Our objective is not just to educate, but to inspire and empower our students to make a meaningful impact on society.

I encourage you to explore the opportunities available at Institute of Technology, Nirma University and embark on this exciting journey with us. Join our vibrant community of learners and discover your potential to shape the future.

Warm regards.

Dr. Himanshu Soni

Director

School of Technology

Institute of Technology, Nirma University

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1. General Information

ABOUT THE INSTITUTE

Founded with the vision of Padma Shri Dr. Karsanbhai K. Patel, the Institute of Technology, Nirma University, earlier known as Nirma Institute of Technology, established in 1995, was the first self-financed engineering college in Gujarat. Institute of Technology, established in 1995, is the flagship Institute of Nirma University

The Institute is identified with robust academic programmes, quality teaching-learning process and overall personality development interventions of its students. A blend of the young and experienced faculty, committed to teaching and research and have proven to be the best mentors to budding engineers. The Institute offers multidisciplinary undergraduate, postgraduate and doctoral programmes in Engineering and Technology. Discipline, an ethical and professional work culture, and commitment to providing quality education are the hallmarks that define the Institute.

The National Institutional Ranking Framework (NIRF), Ministry of Education, Government of India has ranked Nirma University in the rank band of 100-150. The NIRF framework outlines a methodology to rank institutions across the country. The parameters broadly cover "Teaching", Learning and Resources", "Research and Professional Practices", "Graduation Outcomes", "Outreach and Inclusivity" and "Perception". The Institute figures in the top 15 self-financed colleges in the country and amongst top 3 in the state as positioned by top rated ranking agencies. The Institute is known for it proves in the field of Artificial Intelligence and Machine Learning and has established a Centre of Excellence in Data Science in collaboration with the State University of Binghamton, in Cyber Security and another in Robotics and Automation. The Institute has implemented the National Education Policy 2020 for first-year undergraduate students from the Academic Year 2022-23 and onwards. NEP 2020 envisages that the existing curriculum and pedagogy shall be restructured in such a way as to develop respect for the Fundamental Duties and Constitutional values. This would inculcate a conscious awareness of one's roles and responsibilities.

The Institute gives ample opportunities to its students and strives to equip our students in terms of providing the skills, ability and knowledge required for life-long learning and accolades.

Accreditation

The Institute of Technology is a constituent Institution of Nirma University. Nirma University and its constituent Institutions are accredited by National Assessment and Accreditation Council (NAAC), an autonomous institution of the University Grants Commission, Government of India with 'A+' grade.

Institute of Technology, Nirma University takes pride in announcing that all the Under Graduate programmes have undergone the National Board of Accreditation (NBA) process under Tier-I category.

Within a short span of time, the Institute is recognized as one of the leading centre of higher education in the country. In addition to offering robust academic programmes and quality teaching-learning process, the all-round development of students is planned through a blend of co-curricular, extra-curricular, societal and professional activities.

Over the years, the Institute has worked towards achieving excellence and is now known for –

- Excellent national reputation
- More than 200 companies enrolled for campus placements; excellent placement record across all branches
- New curriculum as per NEP- 2020
- Learner centric approach along with personalized attention to the students
- Focus on synergy between teaching and all-round development of the students
- Meritorious students with geographical diversity in undergraduate programmes
- Well placed closed-loop feedback system for curriculum development encompassing all the stake holders
- Globally compatible academic credit system with emphasis on continuous evaluation
- Well-disciplined conducive academic environment and ambience
- Active linkages with industries and research organizations
- Continuous emphasis on faculty and staff- development
- Strong commitment and dedicated efforts towards continuing education and pedagogy

The Institute also offers a wide range of choices to cater to the diverse interests of students and provide additional opportunities to fast learners. Some of the initiatives to that effect are –

- Interdisciplinary minors in the areas of Data Science, AI&ML, Robotics and Automation, Marketing, Finance, Design and more.
- Large basket of Electives leading to specialization in a chosen area within the discipline
- Opportunity to work with faculty members on funded research projects from DST/ISRO/IPR and others
- Choice of Internship in the industry / foreign university or R & D organization for six months
- Value added courses like Design Thinking, Critical Thinking, ICT Tools, Cyber Security, Yoga & Meditation, Ethics & Values, Applied Literature and more
- Opportunities for Internship and enrolling in preapproved MS programmes in top-league US and Canadian universities such as University of Southern California, Iowa State University, Carlton University, Florida Atlantic University, etc.
- Funding and guidance for innovative ideas to promote start-up ventures
- Connect with the community through the community service programme

Campus attractions

Nirma University's sprawling 115-acre campus features significant flora reserves, well-designed buildings, a herbal garden, a host of playgrounds, and peppered amongst these are 21 monumental sculptures to give shape to the vision of the Nirma University to let students seek inspiration in Art. The natural surroundings provide an opportunity for visitors to visually engage and explore these sculptures at their own leisure.

Twenty one sculptors were engaged to carve out these masterpieces on the university campus. The project, unprecedented in many ways, is aimed to renew societal interest in public art. This is a massive vision, one that has the potential to go beyond the boundaries of the Nirma University.

Workshop curators, Mr Surya Goswami, a senior sculptor, and Mr Atul Padia, an independent Visual Artist mobilised expert sculptors from Nagpur, Mumbai, Haryana, Punjab, Banaras, Udaipur, Thane, Saputara, Ahmedabad, and Vadodara. They traversed mines in search of the right raw materials and picked rocks of 8 different types for carving them into gigantic sculptures.

Sculptures at the Campus

One cannot miss out the Student statue at the entrance of the Nirma University. The statue has been created in Bronze in the year 2015. Weighing approximately 2400 kg, it is 11feet in length, 6 feet in width, and 10 feet in height made by Shri Ratilal Kansodaria (Ahmedabad). It represents a child who is studying.



Goddess Saraswati Statue

The statue was made by Pandey Moorti Bhandar (Jaipur) from pure white spotless Makrana marble. The height of the statue is 5 feet. One cannot miss out the serene and calm impact it offers as one enters the gates of the Institute of Management, Nirma University. As we all know, Saraswati is a symbol of learning, it is rightly installed at the University, the hub of learning. Saraswati Statue Both, these statues and the other sculptures installed later are a part of our learning ambience.



NETWORKING INITIATIVES

Memorandum of Understanding (MoU) helps in creating a seamless opportunity to explore collaboration and interaction between the players. The Institute has always strived to develop connect with other Universities & organizations of repute. Institute of Technology, Nirma University has various MoU with a number of Universities & Organizations- nationally and internationally.

MoU with Foreign Universities/ Organizations

- Arizona State University, US
- Binghamton University, USA
- Carleton University, Canada
- Changwon National University, South Korea
- Coventry University, UK
- Crypto University
- Curtin University, Australia
- Florida Atlantic University, Board of Trustees, USA
- Iowa State University, USA
- Kampala International University, Uganda
- LaTrobe University, Australia
- Maker Bhavan Foundation, US
- Makerere University, Uganda
- Management and Science University, Malaysia
- Massachusetts College of Pharmacy and Health Sciences (MCPHS), US
- Memorial University of Newfoundland, Canada
- Pennsylvania State University, US
- Rochester Institute of Technology, US
- Royal Melbourne Institute of Technology, Australia
- State University of New York at Binghamton, US
- The University of Dundee, UK
- University Teknologi MARA (UiTM), Malaysia
- University of Houston, US
- Universidad Publica de Navarra Nafarroako

Unibersitate Publikao, Spain

- University Teknologi MARA, Malaysia
- University of Georgia, USA
- University of Nairobi, Kenya
- University of Newcastle, Australia
- University of Southern California, USA
- University of Wyoming, USA
- USC Viterbi School of Engineering, USA
- Wadhvani Operating Foundation, USA
- Wolkite University, Ethiopia

MoU with Educational Institutions / Research Organizations

- Advanced Materials and Processes Research Institute (AMPRI), Bhopal
- Ahmedabad Textile Industry's Research Association (ATIRA), Ahmedabad
- Building Energy Efficiency Project (BEEP)
- Central Building Research Institute, Roorkee
- Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar
- Finecure Pharmaceutical Company
- INS Valsura, Jamnagar, Gujarat
- Indian AirForce
- Institute of Plasma Research, Gandhinagar
- ITER India, Gandhinagar
- National Chemical Laboratory (NCL), Pune
- Physical Research Laboratory, Ahmedabad
- Sardar Patel Renewable Energy Research Institute (SPRERI), V.V.Nagar
- Satellite Application Centre, Indian Space Research Organization, Ahmedabad

MoU with Industries

- Azure Knowledge Corporation Pvt.Ltd
- B&R Industrial Automation Pvt Ltd.
- Confederation of Indian Industries (CII)
- Dr Fixit Institute of Structural Protection and Rehabilitation
- D-360 Pvt. Ltd.
- e-infochips, Ahmedabad
- enti INNOVATIONS Pvt. Ltd., Bengaluru
- NORD Drive Systems Pvt. Ltd., Pune
- NVIDIA Corporation
- Tata Consultancy Services iON
- Tata Motors Limited, Mumbai
- Finecure Pharmaceuticals Ltd.
- Gujarat Industrial Development Corporation, Gandhinagar
- Johnson Control Hitachi Air Conditioning India Ltd.
- IBM Technologies, Bengaluru
- INFOSYS Technologies, Bengaluru
- InspirOn Engineering Pvt. Ltd., Ahmedabad
- J K Lakshmi Cement Limited, Gandhinagar
- Larsen & Toubro Limited
- Mitsubishi Electric India Pvt. Ltd., Pune
- Polycab (I) Ltd
- Robert Bosch Engineering and Business Solution Pvt. Ltd. (RBEI), Bengaluru
- Secure Meters Limited, Udaipur
- Yudiz Solution



RECRUITERS

- Accenture India Private Limited
- Adani Group
- Aditya Birla [Birla Cellulosic]
- Amtech Electronics (India) Limited
- Aqua Gel Chemical Private Limited
- Argusoft India Limited
- Asea Brown Boveri Limited [ABB]
- Asia Motors Private Limited
- ATUL Limited
- Bayer India Limited
- BGR Energy Systems Limited, Chennai
- Bhagwati Associates Pvt Limited
- Cadila Healthcare Limited
- Capgemini India Co Private Limited
- Caterpillar India Pvt Ltd
- Cinemeta Entertainment (India) Private Limited
- CMC Limited
- Cognizant Technology Solutions India Private Limited
- Crompton Greaves Limited
- CSSI [Computer Solutions & Software International]
- Cybage Software Private Limited
- Cyberverx Software Solutions Private Limited
- Deloitte Consulting India Private Limited
- Denag Cranes & Components India (P) Ltd
- DLF Limited
- Dolcera ITES Pvt Ltd
- DOLPHIN Steel
- Construction LLC
- Doshi ION Exchange & Chemical Industries Limited
- Dresser Rand India Private Limited
- eClinical Works
- Eicher Motors Limited
- E-Infochips Limited
- Elitecore Technologies Limited
- EMCO Limited
- Emerson Process Management (I) Private Limited
- Entity Solutions Limited
- Erhardt + Leimer (India) Limited
- Ericsson India Private Limited
- Essar Limited
- ETA Engineering Private Limited
- Evolutionary Systems Pvt Ltd
- FAG Bearings India Limited
- Feast Software Private Limited
- Fiserv
- FLD Smith Limited
- Freescale Semiconductors Limited
- Future First Info Services Private Limited
- Galaxy Group
- Gammon India Limited
- Gannon Drunkenly & Co Limited
- Gateway Technolabs Private Limited
- GEA Process Engineering (India) Limited
- Geometrics Global
- GHCL Limited
- GIFT [Gujarat International Finance Tech City Co Ltd]
- GMMCO Limited
- GNFC [Gujarat Narmada Fertilizer Valley Corporation]
- Godrej & Boyce Mfg Co Limited
- GSFC [Gujarat State Fertilizers Corporation]
- Gujarat State Petronet Limited

- Hewlett Packard India Sales Private Limited
- Hindustan Construction Company Limited
- Hindustan Uniliver Limited
- Hitachi Hirel Electronics Private Limited
- Hitachi Home & Life Solutions (India) Limited
- IBM India (P) Limited
- ICICI Bank Limited
- IFB India Private Limited
- I-Flex India Private Limited
- I-many Software Private Limited
- Impetus InfoTech (India) Private Limited
- Indian Oil Corporation Limited
- Indian Rayon and Industries Limited
- Indusa Infotech Pvt Limited
- InfoStretch Solutions Pvt Ltd
- Infosys Technologies Limited
- Ingersoll Rand
- Intel India Pvt Limited
- Jacobs Engineering Private Limited
- JK Laxmi Cement
- JMC Projects India Limited
- Jubilant Organosys Limited
- Jyoti Limited
- KABRA Extrusion Technik Limited
- KAEFER Punj Llyod Limited
- Kalpataru Power Transmission Limited
- KEC International Limited
- Kothari Infotech Limited
- Linde Engineering Pvt Ltd
- Maharshi Electronics Private Limited
- Mahindra & Mahindra Limited
- Mahindra Gears & Transmissions Pvt Ltd
- Mechartes Researchers Pvt Ltd
- Microsoft India Private Limited
- Misys International Financial Services Private Limited
- Modiarc Electrodes Co Limited
- Mother Dairy India Limited
- Motorola India Private Limited
- Morgan Stanley
- National Instruments Systems (India) Private Limited
- Neilsoft Limited
- NIELSEN
- Nirma Limited
- NK Shah Consulting Eng.
- Nokia Siemens Limited
- nVidia Graphics Pvt Limited
- Oracle India Private Limited
- Pacific Pipe Systems Private Limited
- Pankaj Patel Associates
- Patni Computer System Limited
- Philips Limited
- PMI
- Prima Automation India Private Limited
- Real Soft (Intl) Private Limited
- Reliance Industries Limited
- Reliance Infocomm Limited
- RFID-Radio Frequency Identification
- Sabarmati Gas Limited
- SABIC Innovative Plastics India Pvt Ltd
- Samyak InfoTech Private Limited
- Sasken Communication Technologies Limited
- Satyam Computer Services Limited
- Schneider Electric India Private Limited
- Secure Meters Limited
- Shapoorji Pallonji & Co Limited
- Sheladia Associates
- Shriram Alkali & Chemicals

- SHV Energy Private Limited
- Siemens Limited
- Solu-Soft India Private Limited
- ST Microelectronics Private Limited
- Synopsys (India) Private Limited
- Syntel Limited
- Tata Autocomp Limited
- Tata Chemicals Limited
- Tata Consultancy Engineers Private Limited
- Tata Consultancy Services Limited
- Tata ELXSI Limited
- Tata Motors Limited
- Tata Power Company Limited
- Tata Teleservices Limited
- Teach for India
- Tech Mahindra Limited
- Thermax Limited
- Thorogood Associates
- Torrent Pharmaceuticals Limited
- Torrent Power [AEC] Limited
- Transpek Industries Limited
- TVS Motor Company
- Ultratech Cement Limited
- Unigraphics Software
- Unikaihatsu Software Private Limited
- UPL Environmental Engineers Limited
- UST Global
- Vardhman Acrylics Limited
- Vavni Services Private Limited
- VC-ERP Consulting Private Limited
- Vedanta Resources
- Veeral Controls Private Limited
- Viraj Profile Limited
- Vodafone India Private Limited
- Wellspun India Limited
- Wipro Limited
- Zensar Technologies Limited
- Zeus Systems Private Limited

PLACEMENT CELL (III CELL)

The Institute of Technology emphasizes the importance of linkages at national and international levels in order to cater to the core areas of research and development in the form of transfer of technology, curriculum development, continuing education programmes, testing and consultancy, development of industrial manpower, expert lectures by industry experts, students' projects, Industrial visits, internships, training and placement, student and faculty exchange etc. With this view in mind, the **Industry Institute Interaction Cell (III Cell)** was envisaged to be a dedicated cell for Industry Institution Interaction, facilitating all the training, career counselling and placement-related activities.

Infrastructure and Amenities

The III cell is fully equipped with all modern amenities. The rooms are air-conditioned and equipped with multimedia and audio-visual equipment to facilitate effective interaction. Additionally, the following facilities are also available for Recruiters on campus:

- Dedicated access to Computer Lab for conducting online tests
- Air-conditioned halls for presentations
- Conference Rooms
- Interview Rooms
- Skype/Video Conferencing
- Internet/Wi-Fi access
- Guest House for Corporate Visitors
- Food Court
- ATM Facilities
- Health Club and Gym

Training and Career Counselling

III Cell organizes periodic training/workshops to orient students about industry expectations. Additionally, students undergo soft skills training to improve learning in areas like Communication, Resume writing, Presentation Skills, Group discussions and Personal Interviews. Counsellor at the Institute level also assists students in addressing career aspirations.

Campus Placements

The on Campus Placement Process is organized by inviting leading organizations from diverse fields. To be a part of the socioeconomic development of the nation and to strengthen the vision of our institution, professional and growth-oriented organizations, we lay emphasis on Institute–Industry interaction during the placement process, which ensures a mutually beneficial outcome. This process enables students to

explore new avenues while laying the foundations of their careers. On the one hand it helps in placing students in their aspirational sectors, and on the other it helps organizations avail the best talent available in the campus.

Industrial Training for the Students

Training is an integral part of learning. It makes them industry ready to face -world problems. Students are placed in various industries for a period of 6 to 8 weeks and under the supervision and guidance of respective industry personnel. Students also go to Industry for full-time projects in the 8th Semester. The faculty guide is assigned during the same for regular monitoring and evaluation.



INFORMATION ABOUT ALUMNI ASSOCIATION

Nirma University Alumni Forum

We, at Nirma University, are proud of our Alumni and the difference they have made to the world around them. Their contributions have been acknowledged by organizations and institutions as they have marched ahead creating value and opportunities on the way. With more than 2000 members joining the group every year, the alumni network with more than 15000 members currently is growing stronger year on year.

The University has constituted '**Nirma University Alumni Forum**' with the objective to foster continuous engagement of the alumni with their Alma mater and to draw their expert knowledge in the relevant fields to further enhance, strengthen and reinforce the over-all quality of the constituent Institutes of the University.

Nirma Institute of Technology Alumni Association (NITAA)

NITAA has been established by Nirma Institute of Technology for the contacts with Alumni and subsequent interaction with students and institute faculty. Active participation of Alumni members is the strength of NITAA. It is note worth that the Alumni are spread all across globe for higher studies as well as for jobs.

OBJECTIVES OF NITAA

The association shall have the following broadly identified objectives in the field of Engineering and allied branches.

- To establish and maintain contact between the past students, present students and the Institute of Technology.
- To pursue and sustain excellence in Education by interaction between the alumni, faculty and present students of the Institute.
- To strengthen Industry-Institute-Interaction and operate related activities for the benefit of students of the Institute.
- To extend all assistance and co-operation to the institute in its endeavors for the growth and development of education and research in the field of technology.
- To encourage and assist the students of the Institute of Technology in various academics and cultural activities.
- To establish endowments by donation to extend financial and other assistance to deserving students of the Institute for educational and research purposes as per the terms and conditions or as mutually decided with the Board of Management.

- To give away scholarships and awards for deserving past and present students of the Institute of Technology for educational and research purposes as per the terms and conditions to be laid down by the Board of Management.
- To establish endowments by donation to create Chair/s of Professor/s Emeritus in Nirma Institute of Technology in professional and related areas.
- To generate funds through donation for conducting activities for achieving the objectives of the association.
- To project constructive activities of Institute of Technology in India and abroad.
- To provide a common platform for exchange of ideas and disseminating knowledge in professional areas.
- To perform any other constructive activities leading towards the enhancement of the skill and knowledge of the members of the association.

NITAA has also started free scholarship to the needy students from the NITAA fund since year 2008-09.

Activities by NITAA

The Institute of Technology through various departments is involved in various activities for a better Alumni Connection. The institute already has 15000+ alumni members and we are continuously involved in various activities for a better connection. Some of these activities are mentioned as under:

- NITAA annual get together on the first Saturday of every year.
- Alumni Meet is arranged in various cities of India and abroad
- NITAA Scholarship from the NITAA fund to existing students of all branches of BTech and MCA based on merit cum means
- NITAA Alumni Awards one per department are announced on the Foundation day of the Institute (ie 3rd October)
- Alumni Expert Talks conducted department wise or at Institute Level
- Career guidance Seminar and various other interaction sessions for the existing students

The Alumni data management is maintained by online portal named ALMA CONNECT in which, more than 15000+ Alumni members have registered so far.

SALIENT FEATURES ABOUT THE INSTITUTE

Research & Consultancy

Over the years, the Institute of Technology has become more focused on research and has earned an increasing number of consultancies, funded research projects and delivered efficient custom training programmes for scientific organizations and industries. The vision of the leadership, excellent infrastructure & committed faculty has helped create an environment conducive to research. The Institute is emerging as a centre of excellence in multi-disciplinary areas and is committed to cutting-edge research.

Pedagogy

The institute makes use of an appropriate mix of pedagogical tools to train students. This includes lectures from in-house and visiting faculty and experts, seminars, discussions and industrial visits. Continuous evaluation and counselling are important features of each academic programme. Keeping in view the Graduate attributes as demanded by the stakeholders, Institute has revised the Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Course Learning Outcomes (CLOs) of every programme and course. All the outcomes are achievable and tangible. A closed-loop system, encompassing students' feedback is practiced for monitoring the system of course delivery. Institute, being a catalyst of change has done a drastic curriculum reform has judiciously amalgamated legacy courses (core and humanities) with future courses (the one which are emerging and will emerge). The diversification of the course was done keeping in view of the need of 21 century work-places. The workplace demands students having global, environmental and societal awareness that can provide solutions and innovation for societal benefit.

The innovations and initiatives encompass depth and breadth of programs. The commitment was also to introduce lifelong learning courses, enrichment courses, and value-added courses among other equally important ancillary courses.

The institute makes use of an appropriate mix of pedagogical tools to train students to handle professional responsibilities. These include lectures by an appropriate mix of in-house and visiting faculty, expert lectures, discussions, seminars, project assignments and visits to industries and project sites. Continuous evaluation and counselling are important parts of the academic programme.

The Approach to Learning

The Institute synthesizes traditional methods of learning with interactive teaching-learning aids like field-based projects, interaction with practitioners, use of computers and multimedia, creative co-curricular activities for a holistic development of students. The institute lays emphasis on continuous evaluation and credit-based system with weightage on different components of study. Keeping in mind the graduate skill set desire has shifted, the Institute focus on teaching-learning process, curricula and evaluation away from lower-order thinking skills, such as remembering and understanding to higher-order skills, such as analyzing and solving engineering problems. Hence imparting experiential learning

with a strong foundation of core courses with an interdisciplinary flavor along with courses aiming to hone thinking skills, such as design thinking and critical thinking forms the basis of the pedagogy followed at the Institute.

We have implemented the National Education Policy 2020 for first-year student from the Academic Year 2022-23 and onwards. NEP 2020 envisages that the existing curriculum and pedagogy shall be restructured in such a way to develop respect for the Fundamental Duties and Constitutional values, and conscious awareness of one's roles and responsibilities among the students and to inculcate the appreciation among the students regarding the knowledge, skills, values, and dispositions that support responsible commitment to human rights, sustainable development and living, and global well-being, thereby reflecting a truly global citizen.

Teaching Learning Process

The institute has a credit-based evaluation system which motivates students for systematic and continuous study and appraises students on the basis of project work, problem solving, classroom assessment methods, examinations and other tools to evaluate both cognitive as well as applied learning. Self-development, communication skills, societal and environmental awareness, project-based learning are salient features of the teaching learning process. Through projects and internships, students are given sufficient opportunities and support to apply their learning in real life situations.

Courses and Assessment

Nirma University has a credit-based evaluation system. It is devised to motivate students for systematic and continuous study. Term assignments, laboratory and project work are given great importance and are continuously assessed. Moreover, there is a Semester End Examination for theory courses. The institute has also initiated a number of measures to bring the curricula and assessment system of its programmes in conformity with international norms. Open book examination is one of them. Provision is also made for remedial teaching wherever necessary.

Special attention is given to improve English language and Communication Skills of the students. For talented and motivated students, there is a provision of Audit courses. These are additional and optional courses to cultivate familiarity with emerging or advanced interdisciplinary topics.

Discipline - The Keyword

The Institute has earned a name for quality education. This is due to the efforts and devotion of well-qualified faculty of the institution. The academic calendar for the whole year is notified in the beginning and is strictly adhered to. Students' attendance is compulsory and shortfall is notified. It is expected from every student that he/she should conduct himself/herself with discipline, decency and dignity both inside and outside the campus. The institute sends progress reports of the students to their parents periodically with a view to keep them informed. The Institute follows value-based culture and the same is reflected in the norms set by it. Gujarat is a Dry state and consumption of any alcoholic drink is strictly prohibited.

Nirma University campus is fully vegetarian and any kind of non-vegetarian food is not allowed on the campus.

Counselling

Student counselling is a distinguished feature of the institute. Each faculty member is assigned about 18 to 20 students. The faculty meets them periodically and reviews their attendance, submissions, academic performance and provides necessary guidance for improvement. In addition to this, the Institute also provides the services of a professional psychological counsellor who can be approached for any other issues that hinder the learning progress of the students.

Centre for Excellence in Data Science

Data Science is an interdisciplinary field consisting of methods and systems to extract knowledge and insights from data. It encompasses statistics, machine learning, visualization, business analytics, data analytics, and scientific computing. India has demonstrated rapid and sustained economic growth over the last decade and recent developments suggest that a focus on data science is a need of the hour. Taking this into consideration, Institute of Technology, Nirma University has established a Centre of Excellence in Data Science in collaboration with SUNY, Binghamton University, New York, USA.

Centre for Robotics and Automation

The Centre for Robotics and Automation at Institute of Technology, Nirma University facilitates the researchers by providing an environment to develop and upgrade the robotic technology. The research and development in the said field would provide innovative solutions to many automation companies. The Centre aims to provide an interdisciplinary environment and bring together the research groups involved in robotics, control engineering, embedded systems, industrial automation, artificial intelligence, computer coding, machine learning and other related technologies. The state-of-the-art facilities at the Centre would play a vital role in the advancement of robotics and automation field. It also aims to facilitate the need to create industry-ready manpower by imparting training.

Centre for Excellence in Cyber Security

In today's data-driven world, where information technology powers everything from social media to entertainment, the need for robust cyber security is paramount. Recognizing this, the Department of Computer Science and Engineering is establishing a state-of-the-art Cyber Security Laboratory, aligned with the launch of an M. Tech. program in Computer Science and Engineering with a specialization in Cyber Security. Cybersecurity involves protecting computer systems, networks, and data from various threats, including malware, phishing, and ransomware. Given the increasing reliance on digital platforms, both individuals and businesses must safeguard their data from cyber-attacks. To further enhance knowledge and skills in this critical area, the Department of Computer Science and Engineering is also seeking to establish a Cyber Security Club, which will host events such as hackathons, workshops, and competitions to engage students in the field.



INSTITUTE RANKINGS

Nirma University was awarded the Centre of Excellence (CoE) status by the Government of Gujarat in the International Conference of Academic Institutions, part of the Vibrant Gujarat Education Summit 2022.

The National Institutional Ranking Framework (NIRF), Ministry of Education, Government of India has consistently ranked Nirma University among the top 100 institutions in the country. The NIRF framework outlines a methodology to rank institutions across the country. The parameters broadly cover "Teaching", Learning and Resources", "Research and Professional Practices", "Graduation Outcomes", "Outreach and Inclusivity" and "Perception".

| Year/Category | University | Engineering |
|---------------|-----------------------------|----------------------------|
| 2024 | In the Rank- Band 101-150 | In the Rank- Band 101-150 |
| 2023 | In the Rank- Band 101 – 150 | In the Rank-Band 101 – 150 |
| 2022 | In the Rank- Band 101 – 150 | 125 |

Institute of Technology, Nirma University ranking highlights are mentioned as below:

Other Rankings

Non-Government Rankings

Nirma University ranks among the 'Top 10 Private Universities in India' in the annual university rankings published by India Today in its August 2023 issue. The university secured the seventh position among 446 private universities in India. Further, Nirma University ranks as the 'Top Private University' in the West Zone region.

Education Post magazine ranks the Nirma University at 3rd position in the list of Top 100 Private University (Overall) in the Indian Institutional Ranking Framework 2023 in its March-April 2023 issue.

| 2024 | | | | |
|--------|---|----------------------------------|--|---------------------------------------|
| SR NO. | Rank, Level of Rank (City, State, National) | Ranking Agency Name | Ranking Details | Level of Rank (City, State, National) |
| 1 | 7 th amongst Private Universities | India Today | The Best University of India, August 2024 | National |
| 2 | 13 th amongst Private Universities | India Today | The Best University of India, July 2024 | National |
| 3 | 1st amongst Ranking of Supreme Engineering Colleges, CSR Engineering Colleges Survey 2024 | Competition Success Review (CSR) | CSR Rankings India's Top Engineering Colleges 2024 | National |

| | | | | |
|-------------|---|-----------------------|---|--|
| 4 | 3 rd top Private & Deemed Multidisciplinary Universities, West Zone | Hansa Research Survey | The Week- Hansa Research Survey 2024 | National |
| 5 | Ranked amongst top 20 Private & Deemed Multidisciplinary Universities, All India | Hansa Research Survey | The Week- Hansa Research Survey 2024 | National |
| 6 | Ranked amongst top 50 Multidisciplinary Universities, All India | Hansa Research Survey | The Week- Hansa Research Survey 2024 | National |
| 7 | Rated AAAA+ under the Central/Deemed/State Private Universities | Careers 360 | Careers 360, April 2024 | National |
| 2023 | | | | |
| 1 | <p>1st Top Leading Engineering Colleges of Super Excellence by CSR-GHRDC Rankings - Competition Success Review – India's Top Engineering Colleges 2023</p> <p>1st Top Engineering Colleges ranked by State by CSR-GHRDC Rankings - Competition Success Review – India's Top Engineering Colleges 2023</p> <p>4th among Top 20 Engineering Colleges ranked by Faculty, Research, Consultancy, EDP, and other Programmes</p> <p>4th among Top 20 Engineering Colleges ranked by Placements, USP, Social Responsibility, Networking and Industry Interface</p> | CSR-GHRDC | CSR-GHRDC Rankings - Competition Success Review – India's Top Engineering Colleges 2023 | <p>National</p> <p>State</p> <p>National</p> <p>National</p> |
| 2 | 38 th Best Engineering Colleges in India by The Week-Hansa Survey 2023 | The Week-Hansa Survey | The Week-Hansa Survey 2023 | National |

| | | | | |
|---|--|-----------------|--|-----------------------|
| | 13 th Best Private Engineering Colleges in India by The Week-Hansa Survey 2023 2 nd Best Private Engineering Colleges in the West Zone by The Week-Hansa Survey 2023 | | | National State |
| 3 | 23 rd in the top 100 Private Engineering Colleges by the Education World Private Engineering Colleges Ranking 2022-23 2 nd in Gujarat State by the Education World Private Engineering Colleges Ranking 2022-23 | Education World | Education World Private Engineering Colleges Ranking 2022-23 | National State |



DEPARTMENTS - SCHOOL of TECHNOLOGY (SoT) & SCHOOL of ENGINEERING (SoE)

Role of Departments

Departments play a pivotal role in developing and implementing academic programmes. School of Technology constitutes of Computer Science & Engineering (CSE) including the programme of Masters of Computer Application and BTech in Artificial Intelligence and Machine Learning has been introduced from academic year 2024-25., Electronics & Communication Engineering (EC) and Electronics & Instrumentation (E&I) Departments.

The School of Engineering constitutes of Chemical Engineering (CH), Civil Engineering (CL), Electrical Engineering (EE), Mechanical Engineering (ME), Humanities & Social Sciences (H&SS) and Mathematics Departments. Each department has different sections according to the programmes/specialties handled by it.

Mathematics is a diverse field and finds its application in various disciplines of sciences, engineering and technical domain. The Department of Mathematics serves as the ancillary department to the Institute of Technology. The Department of Humanities and Social Sciences under the aegis of the Institute of Technology provides students with well-grounded intellectual resilience and a disposition toward lifelong learning.

The institute has evolved a participatory model of administration through which all proposals of budgetary allocation, academic development, curricular reforms, laboratory updates etc. first originate at the section level and then are finalized at the department and higher level. In this context the role of the faculty in the total process of teaching-learning assumes great importance.

Faculty

Through a judicious recruitment policy and enlightened approach, University has ensured that the institute is staffed by a well-qualified and competent faculty to shoulder the responsibilities of maintaining high standards of education in the institute. In keeping with the aims outlined in the mission statement, the faculty members remain fully conscious of their dual role both as teachers to impart efficiently technical knowledge to students and counsellors to guide them for their overall development.

The faculty at the institute comprise of the pool of talented and dedicated faculty members committed to teaching – learning process with diversified wealth, knowledge, experience and academic specialty. In this ever-changing technical world, the faculty members keep themselves updated with the state-of-the-art tools and technologies. They also contribute to the technical fraternity through research and development in their respective domains.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs) & PROGRAMME OUTCOMES (POs)

By understanding that the traditional model of education is getting digressed in its path by giving more importance to teaching than learning, we have focused upon precise learning outcomes and articulating them as Programme Educational Objectives (PEOs) and Programme Outcomes (POs). Adoption of Outcome Based Education was the pivotal decision to make education delivery learner-centric. We understand that students have diverse learning needs. High impact- high attainment methods such as experiential learning which involves experimentation- experience- reflection-conceptualization in iterative manner; project-based learning is used for hands on experience and cognitive-learning.

The assurance of Learning is well structured. The well-articulated Graduate attribute are mapped with Programme Educational Objectives (PEOs) which in turn percolate down to Course Outcome (CO). The tangible outcomes are attained through various indirect and direct assessment (formative and summative) methods.

Program Educational Objectives (PEOs) are the statements that describe the expected achievements of graduates within first few years of their graduation from the program. The PEOs may be guided by global and local needs, vision of the Institution, long term goals etc.

Programme Outcomes (POs) statements about the knowledge, skills and attitudes (attributes) the graduate of a formal engineering program should have. The (POs) are further mapped with the (COs).

The following are the PEOs and POs of B Tech programme:

| PROGRAM EDUCATIONAL OBJECTIVES (PEOs) | PROGRAMME OUTCOMES (POs) |
|--|---|
| <p>The Program Educational Objectives of BTech. Programme are:</p> <ul style="list-style-type: none"> • PEO I: To prepare graduates who will be successful professionals in industry, government, academia, research, entrepreneurial pursuit and consulting firms. | <p>Undergraduate engineering programme are designed to prepare graduates to attain the following program outcomes:</p> <ul style="list-style-type: none"> • Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. • Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. |

| | |
|--|---|
| <ul style="list-style-type: none"> • PEO II: To prepare graduates who will contribute to society as broadly educated, expressive, ethical and responsible citizens with proven expertise. | <ul style="list-style-type: none"> • Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. • Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions |
| <ul style="list-style-type: none"> • PEO III: To prepare graduates who will achieve peer-recognition; as an individual or in a team; through demonstration of good analytical, design and implementation skills. | <ul style="list-style-type: none"> • Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations. • The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. |
| <ul style="list-style-type: none"> • PEO IV: To prepare graduates who will thrive to pursue life-long learning to fulfill their goals. | <ul style="list-style-type: none"> • Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. • Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. • Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. • Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective |

presentations, and give and receive clear instructions.

- **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



2.

Student Centric Information

ACADEMIC CALENDAR

Term: Odd -2024-25

- **B Tech Semester – I (All Programmes)**
- **Integrated B Tech (CSE)-MBA Semester-I**

| | |
|--|--------------------------|
| • Semester commencement | 20 -07- 2024 |
| • Orientation | 20-07-2024 to 03-08-2024 |
| • Teaching Phase – I | 05-08-2024 to 13-10-2024 |
| • Registration (IR) | 23-09-2024 to 27-09-2024 |
| • Academic / Attendance Review-I | 12-09-2024 |
| • Parents-Teacher Meeting | 21-09-2024 |
| • Sessional Examination | 14-10-2024 to 17-10-2024 |
| • Teaching Phase – II | 18-10-2024 to 25-10-2024 |
| • Academic / Attendance Review -II | 24-10-2024 |
| • Teaching Phase – III | 04-11-2024 to 11-11-2024 |
| • Academic / Attendance Review -III | 28-11-2024 |
| • LPW Examination (Teaching Continue...) | 02-12-2024 to 11-12-2024 |
| • Semester End | 11-12-2024 |
| • Semester End Examination (SEE) | 16-12-2024 onwards |
| • Commencement of next semester | 30-12-2024 |

EVENT

| | |
|----------------|------------|
| Foundation Day | 03-10-2024 |
|----------------|------------|

HOLIDAYS

| | |
|--------------------------------|------------|
| • Independence Day | 15-08-2024 |
| • Rakshabandhan | 19-08-2024 |
| • Janmashtami | 26-08-2024 |
| • Samvatsari /Ganesh Chaturthi | 07-09-2024 |
| • Mahatma Gandhi's Birthday | 02-10-2024 |
| • Dussehra (Vijya Dashmi) | 12-10-2024 |
| • Guru Nanak's Birthday | 15-11-2024 |

Diwali Vacation (Students): 28-10-2024 to 02-11-2024

IMPORTANT CONTACTS

| No | Place | Block | Contact Person | Contact Detail | |
|----|--------------------------------------|-----------------------------------|----------------------|----------------------------------|---------------|
| | | | | Email ID | Ext. |
| 1 | Director School of Engineering | A | Dr. Rajesh N. Patel | director.it@nirmauni.ac.in | 9110 |
| 2 | Director School of Technology | E-Block 12 th Floor | Dr. Himanshu Soni | director.sot@nirmauni.ac.in | 9534 |
| 3 | Asst. Registrar Admin, ITNU | A | Shri Dinesh Patel | ar.it@nirmauni.ac.in | 9512 |
| 4 | Head First Year | D | Dr. Dipak Adhyaru | head_fy.it@nirmauni.ac.in | 9411 |
| 5 | HOD-CH | A | Dr. Milind Joshipura | hod_chem.it@nirmauni.ac.in | 9136 |
| 6 | HOD-ME | A | Dr. Kaushik Patel | hod_mech.it@nirmauni.ac.in | 9154/ 9102 |
| 7 | HOD-EE | D | Dr. Santosh Vora | hod_ee.it@nirmauni.ac.in | 9401 |
| 8 | HOD-EC | D | Dr. Usha Mehta | hod_ec.it@nirmauni.ac.in | 9402 |
| 9 | HOD-EI | D | Dr. Himanshu Patel | hod_ei.it@nirmauni.ac.in | 9405 |
| 10 | HOD-CL | B | Dr. Urmil Dave | hod_civil.it@nirmauni.ac.in | 9211 |
| 11 | HOD- CSE | B | Dr. Sudeep Tanwar | hod_ce.it@nirmauni.ac.in | 9212 |
| 12 | HOD-Mathematics | B | Dr. Kunal Pathak | hod_maths.it@nirmauni.ac.in | 9216 |
| 13 | HOD- Humanities | B | Dr. Richa Mishra | hod_hss.it@nirmauni.ac.in | 9215 |
| 14 | Assistant Registrar - Academics ITNU | E-Block 12 th Floor | Dr. Kehul Shah | ar.itacad@nirmauni.ac.in | 9513 |
| 15 | Central Library | E-Block 4 th Floor | Mr. Sujal Soni | lib.it@nirmauni.ac.in | 9231 |
| 16 | Student Section | B | Shri Praful Saini | sts.it@nirmauni.ac.in | 9321/ 9322 |
| 17 | III Cell | K | Mr. Sunil Pandi | placement.itnu@nirmauni.ac.in | 9141 |
| 18 | Student Welfare | ID | Mr. Bhavesh Parekh | studentwelfare@nirmauni.ac.in | 557 |
| 19 | Kalupur Bank | K | Branch Manager | kalupurbank@nirmauni.ac.in | 9152 |
| 20 | Dy. Registrar (Exam), NU | E 13 th Floor | Dr. Nilesh Patel | dy_registrar.exam@nirmauni.ac.in | 9698 |
| 21 | Chief Accounts Officer | E-Block 13 th Floor | Ms. Palak Shah | accounts@nirmauni.ac.in | 9673 |

| No | Place | Building | Contact Person | Contact Detail | |
|----|--|-----------------------------------|----------------------|--|------|
| | | | | Email ID | Ext. |
| 22 | Accounts Section | E-Block 13 th Floor | | account_officer@nirmauni.ac.in | 9674 |
| 23 | Dy. Registrar-Academic Section, NU | E-Block 13 th Floor | Dr. Ravindra Sen | asst_registrar@nirmauni.ac.in | 9680 |
| 24 | Health Center | Near DG Set | Dr. Rajesh B. Patel | healthcentre.nu@nirmauni.ac.in alishaclinic@yahoo.co.in | 9222 |
| 25 | Counsellor | NIM | Ms. Sapna Bhatt | sapna.bhatt@nirmauni.ac.in | |
| 26 | Transport Section | Bus Parking | Shri Shailesh Patel | transport@nirmauni.ac.in | 9157 |
| 27 | Anti-Ragging Committee | D | Dr. Amisha Naik | amisha.naik@nirmauni.ac.in | -- |
| 28 | Anti-Drug Committee | D | Dr. Amisha Naik | amisha.naik@nirmauni.ac.in | |
| 29 | Grievance Redressal Cell | A | Shri Dinesh Patel | ar.it@nirmauni.ac.in | 9512 |
| 30 | Women Development Cell | A | Dr. Neha Patni | neha.patni@nirmauni.ac.in | |
| 31 | Complaints Committee for Prevention of Sexual Harassment | B | Dr. Madhuri Bhavsar | madhuri.bhavsar@nirmauni.ac.in | 9212 |
| 32 | Nirma Institute of Technology Alumni Association (NITAA) | A | Dr Sanjay Jain | sanjayjain@nirmauni.ac.in | -- |
| 33 | Centre For Continuing Education | D | Dr. Yogesh Trivedi | yogesh.trivedi@nirmauni.ac.in | -- |
| 34 | Equal Opportunity Cell | A | Dr. Milind Joshipura | milind.joshipura@nirmauni.ac.in | 9136 |
| 35 | K – Canteen | K | Mohani Caterers | -- | -- |

University EPABX Number - 079 71652000

For Direct contact use Ext. Number instead of last 3 digit of given number as above.

ABOUT THE UNDERGRADUATE PROGRAMME

The Institute of Technology is a constituent Institute of Nirma University. The University has approved the undergraduate degree level Programmes offered by the Institute.

The programmes are of four years/Eight-Semesters. The academic schedules provide for a reasonable mix of courses in Humanities, Basic Sciences, Basic and Applied technology, and Electives in interdisciplinary, inter-institute and advanced areas. Professional and project training of short/ long duration, appropriate to the technical discipline of the Programme, is also included.

Special attention is given to develop English and Communication Skills in the students. General development courses that promote self-development and societal and environmental awareness are also being planned. For talented and motivated students, there is a provision of audit courses. These are additional and optional courses to cultivate familiarity with emerging or advanced interdisciplinary topics.

The Institute has also initiated a number of measures to bring the curricula and assessment system of these Programmes in conformity with international norms. These measures are listed below.

- Revision of the curricula for greater relevance to industrial and professional needs.
- The course is taken as the unit of registration. This leads to focused attention on each course and hence leads to a more effective pedagogic effort.
- The course is subdivided into components, each with its characteristic identity. They are designed to develop greater understanding of the subject matter and also to enhance analytical and practical skills, library use, self-study and report writing and presentation abilities.
- Each course carries certain credits and credits are earned on successful completion of the course.
- Each course consists of one or more components. Each component serves a specific purpose in the total scheme of teaching. Passing standard for each component is the same and the student has to pass in each component separately. This provision ensures that the student becomes fully conversant with all aspects of the course.
- There are maximum three components in a course. Except for semester end examination, other components are assessed continuously during the semester. There is also a semester end overall assessment of the components. The students are kept informed about their performance at every stage. This method encourages the students to study regularly and also provides motivation for progressively better performance.
- The Institute follows value-based culture and the same is reflected in the norms set by it. Gujarat is a Dry state and consumption of any alcoholic drink is strictly prohibited. Nirma University campus is fully vegetarian and any kind of non-vegetarian food is not allowed on the campus.

COMPONENTS OF A COURSE

The course consisting one or more of the following components as mention below.

I. LECTURES (LECT) - Teaching learning processes conducted in real-time (Off-line).

II. CONTINUOUS EVALUATION (CE) - Apart from classroom teaching, the continuous evaluation component(CE) of a course typically refers to the ongoing assessment of students' performance throughout the duration of the course in a particular semester. continuous evaluation involves one or more strategies i.e regular assessments of assignments, quizzes, term paper, term projects etc.

III. LABORATORY PRACTICAL WORK (LPW) and/or PROJECT WORK -

LPW involves hands-on experiment and observation in a laboratory environment. It provides opportunity to apply theoretical knowledge gained in lectures and such sessions focus on developing practical skills such as experimental techniques, data collection, analysis, and interpretation etc.

LPW assessments typically include lab reports, where students document their experimental procedures, results, and conclusions allowing students to gain hands-on experience and reinforce theoretical concepts through application.

Project work involves students working independently or in groups to investigate a specific research/ problem and can vary in scope and complexity,

Project work encourages critical thinking, creativity, and independent learning and assessment of project work may include project proposals, progress reports, final presentations, and written reports or research papers.

Project Work, either research based or related to industry, or practice oriented problems / topics.

EXAMINATIONS

The Semester End Examination (SEE) is a comprehensive assessment conducted at the end of an academic semester or term. It serves the evaluation of students' knowledge, understanding, of the course covered throughout the semester.

Overall, Semester End Examinations(SEE) serve as an important measure of students' academic progress and achievement, providing a comprehensive assessment of their learning outcomes for the semester.

Continuous Evaluation (CE), Laboratory Practical Work (LPW) and project work are continuously assessed. Students must remain regular and complete all assignments, practicals etc up to acceptable standards. If the student fails in any subject(s) CE component and/or LPW components, the students will not be permitted to appear in SEE of that course(s). The student shall have to seek again fresh registration under RRC and/or RRP category. In RRC registration the student has to appear in all examinations concerned for CE component and under RRP registration the student has to repeat the LPW component of a course and appearing the concerned examination.

Semester End examination (SEE) being conducted at the end of each semester and it will cover the whole syllabus. After SEE,the institute may hold supplementary examinations (SPE) for those students registered under IR category in a particular Semester and eligible as per academic rules and regulation 14.2

Note: For further details please refer Academic Rules and Regulations section 5 in the booklet.

STUDENT SOCIETIES

The students' societies are the pivot around which the cocurricular extra-curricular activities of the Institute revolve and play a significant role in the life of the students. They serve as an important adjunct to course work. Moreover, they sponsor lectures by eminent engineers, conduct debate, competitions, general knowledge quizzes, essay competitions and various programmes including games and sports in order to stimulate a student's interest in the diverse spheres of life. It provides ample opportunities for the students to develop their abilities in fine arts by conducting music competitions, dramatics, etc. This encourages emotional integration amongst the students to a very great extent.

The main aims and objectives of the students' societies are as follows:

- To promote disciplined corporate, intellectual, civic and cultural life amongst the students.
- To foster activities to bring out the creative talents of the students.
- To promote the study (including discussion) of subjects of national and international importance.
- To encourage amongst students, the awareness of the responsibilities of an individual in a democratic society.
- To promote social service activities.
- To know the latest developments.

The following societies are presently functioning:

| | | |
|-------|---|---|
| MESA | : | Mechanical Engineering Students Association |
| CHESA | : | Chemical Engineering Students Association |
| OrCES | : | Organization of Civil Engineering Students |
| ECO | : | Electronics & Communication Students Association |
| EESA | : | Electrical Engineering Students Association |
| ISA | : | The International Society for Automation |
| IEEE | : | International Society of Electrical & Electronics Engineering |
| ACES | : | Association of Computer Engineering Students |
| AMS | : | Association of MCA Students |
| CSI | : | Computer Society of India, Students Chapter, Ahmedabad |
| ISTE | : | Indian Society of Technical Education, Student Chapter |

- SAE : Society of Automotive Engineers India, Student Chapter
- ASHRAE : The American Society of Heating, Refrigerating and Air-Conditioning Engineers-Western India, Student Chapter
- IChE : Indian Institute of Chemical Engineers, Student Chapter

Students' associations together organizes a flagship annual technical colloquium of national level at the Institute and become a host of ignited mind of young engineers participating across the nation.

- NU-TECH : National Level Colloquium of Institute of Technology

LOOKING BEYOND CURRICULUM

Student Associations

The Institute makes all possible efforts for all round development of each and every student by way of extra-curricular as well as co-curricular activities. To arrange such activities, there are many student forums. These branch wise student associations are formed to serve as the pivots, around which the diverse activities revolve and play a significant role in the development of the students. Throughout the year, these associations arrange many activities like expert lectures by eminent speakers, different competitions, debates, quiz, etc. Students also organize blood donation camps, "CRY" card sale, Thalassaemia awareness programmes, etc. The institute also encourages students of different departments to organize national / state level technical festivals including a national level mega event NU-Tech. The main aims and objectives of the student associations are as follows:

- To promote disciplined intellectual, professional and cultural life amongst the students.
- To foster activities to bring out the creative talents of the students and to promote the study (including discussion) of subjects of national and international importance.
- To encourage amongst students, awareness of the responsibilities of an individual in a democratic society.
- To promote social service activities and to know the latest developments.

The following associations are presently functioning:-

| Student Associations | Faculty Coordinator |
|---|---|
| ACES Association of Computer Engineering Students | Dr. Sapan Mankad (sapanmankad@nirmauni.ac.in) Dr. Vipul Chudasama (vipul.chudasama@nirmauni.ac.in) |
| AMS Association of MCA Students | Dr. Deepika Shukla (deepika.shukla@nirmauni.ac.in) |
| ChESA Chemical Engineering Student Association | Dr. Narasimha Reddy (narasimhareddy.ravuru@nirmauni.ac.in) |
| CSI Computer Society of India | Dr. Tejal Upadhyay (tejal.upadhyay@nirmauni.ac.in) |
| ECO Electronics & Communications Organization | Dr. Akash Mecwan (akash.mecwan@nirmauni.ac.in), Prof. Hardik Joshi (hardik.joshi@nirmauni.ac.in) |

| | |
|---|--|
| EESA Electrical Engineering Students' Association | Dr. Chintan Mehta (chintan.mehta@nirmauni.ac.in), Dr. Homraz Amroliya (homaraz.amroliya@nirmauni.ac.in) |
| CodeAdda Club | Dr. Ankit Thakkar (ankit.thakkar@nirmauni.ac.in) |
| IEEE-SB Institute of Electrical and Electronics Engineering | Dr. Manisha Shah (manisha.shah@nirmauni.ac.in) |
| ISA (The International Society of Automation) STUDENTS' CHAPTER | Dr. Himanshu Patel (hkpatel@nirmauni.ac.in) Dr. Sneh Soni (sneh.soni@nirmauni.ac.in) |
| IIChE Student Chapter Indian Institute of Chemical Engineers Student Chapter | Dr. Narasimha Reddy (narasimhareddy.ravuru@nirmauni.ac.in) |
| ISTE (Student Chapter) Indian Society for Technical Education | Prof. Ath Singhal (ath.singhal@nirmauni.ac.in) |
| MESA Mechanical Engineering Student Association | Dr. Mihir Chauhan (mihir.chauhan@nirmauni.ac.in), Prof. Rudresh Makwana (rudresh.makwana@nirmauni.ac.in) |
| OrCES Organization of Civil Engineering Students | Dr. Tejas Joshi (tejas.joshi@nirmauni.ac.in) |
| Society of Automotive Engineers (SAE Nirma Collegiate Club) | Dr. Absar Lakadawala (absar.lakadawala@nirmauni.ac.in) Dr. Dhaval Shah - dbshah@nirmauni.ac.in Prof. P N Kapil - pnkapil@nirmauni.ac.in |
| ROBOCON Team | Dr. Rajesh N. Patel (rnp@nirmauni.ac.in) Dr. Mihir Chauhan (mihir.chauhan@nirmauni.ac.in) Dr. Akash Mecwan (akash.mecwan@nirmauni.ac.in) |

ROBOCON

Institute of Technology, Nirma University Team Robocon won the national Robocon 2022. It is 10th time the Nirma University won the National Robocon. The team will now represent India in the international contest. Robocon is an international robotics event, organised by Asia Broadcasting Pacific Union (ABU) every year. The ABU member country announces the theme and hosts the international Robocon event every year. India is the host country for the ABU Robocon 2022. A team from every ABU member country participates in the international contest. To decide the national winner, a National Robocon 2022 competition was organised by IIT, Delhi in collaboration with Doordarshan, India at Thyagraj Stadium, New Delhi during July 14 – 17, 2022. Also, Team Nirma Robocon secured Second Runners up position at DD Robocon National 2023 and also received IHFC Winner Award by way of cash prize of Rs.5000/- at 22nd National Robocon competition held during June 15-18, 2023 at Thyagaraj Stadium, New Delhi organized by Doordarshan and IIT Delhi. Team competed with 68 teams from India including IITs and NITs.

The team ROBOCON won the National Championship title 2024. This victory marks our team's 11th National Championship title, setting a new record in our institution's history. Competing against 86 teams from esteemed institutions across the Nation, including IITs and NITs, our team excelled in both creativity and technical prowess. Out of these teams, 46 qualified for the final round, where Nirma Robocon demonstrated exceptional skill and determination. The National Robocon competition was held in New Delhi during July 12-14, 2024 by Doordarshan and IIT, Delhi. As a result of their remarkable performance, Team Nirma Robocon has earned the honor of representing India in the International Robocon competition scheduled to take place in August 2024 in Vietnam. This was the 11th victory of Team Nirma Robocon in the national event out of 22 events organised till date. Team Nirma defeated SRM University and Pune Institute of Computer Technology in the league matches. Nirma won against Parul University,



Baroda, MIT – WPU, Pune and Government College of Engineering and Research, Avasari in the quarter-final, semi-final and final respectively. Team Nirma was the only team, who could complete the entire game within the given time limits. Team Nirma Robocon represented India at the International Robocon contest in August 2022. This is the first time in the history of ROBOCON an Indian team reached the semi-finals at International ROBOCON competition and secured 2nd runner-up position. 10 times National Champion Team NIRMA ROBOCON secured Second Runners up position at DD Robocon National 2023 and also received IHFC Winner award at 22nd National Robocon competition held during 15 to 18 June 2023 at Thyagaraj Stadium, New Delhi organized by Doordarshan and IIT Delhi. Team competed with 68 teams of India including IITs and NITs.

The team Nirma Robocon is mentored by Dr Mihir Chauhan and Dr Akash Mecwan under the leadership of Dr Rajesh N. Patel, Director, ITNU.



SAE NIRMA COLLEGIATE CLUB

SAE Nirma Collegiate Club is a platform for young engineering minds to apply their practical skills and explore every single dimension. It involves students from different branches of the Institute working together. SAE includes TEAM STALLIONS and TEAM ARROW where, students work dedicatedly towards building innovative All-Terrain Vehicles and Aero Models for participating in SAE-BAJA and SAE INDIA AERO DESIGN Challenge every year.

SAE- Nirma collegiate Club was started in the year 2010 it serves as center of excellence for automotive and unmanned vehicle development and research for welfare of the society and nation that is recognized globally for its quality of technology. Our mission is and always has been to innovate, to push the boundaries of every student via creativity, ingenuity and dexterity. SAE club is dedicated to creating the best vehicle by designing, manufacturing, testing, developing, racing and promoting it. The purpose of this organization is to provide its members opportunities to gain broader insight into the engineering profession.

SAE Nirma Collegiate Club is a platform for young engineering minds to apply their practical skills and explore every single dimension. It involves students from different branches of the Institute working together. SAE includes TEAM STALLIONS and TEAM ARROW where; students work dedicatedly towards building innovative All-Terrain Vehicles and Aero Models for participating in SAE-BAJA and SAE INDIA AERO DESIGN Challenge every year. SAE has also added a TEAM DY AUS in the year 2022 with the vision to build Satellite for CAN-SAT Competition. Team Arrow, a part of the SAE Nirma Collegiate Club, has secured an impressive overall 3rd position among 67 International teams at the AUVSI - Students Unmanned Aerial Systems (SUAS) 2024 competition held in Maryland, USA during June 25-27, 2024. The team was awarded a cash prize of \$2,000 and a plaque in recognition of their outstanding performance. Also, Team Arrow a part SAE Nirma Collegiate Club secured overall 5th position amongst 71 International teams participated in AUVSI SUAS 2023 competition held at Maryland, in USA. Team won a cash prize of 500 USD and a plaque. Team competed alongside the prestigious institutions such as Cornell University, University College London, North Carolina University, Virginia Tech, Purdue University and 7 other University of US, University of Calgary, Norwegian University, Istanbul Tech University, King Fahd University, University of Warsaw, Royal Thai Airforce Academy, Military school of Egypt etc.

The team Arrow represented Institute of Technology, Nirma University, participated in SAEISS DDC 2023 competition in Micro and Regular categories held at Chennai secured first prize for Design Report and second prize overall under the Micro Category. For, the regular category the team secured first prize for Computational Fluid Dynamics (CFD) Award and second prize for Design Report.



OTHER ACTIVITIES

Co-curricular Activities

The Institute also gives equal importance to projects, industrial visits and training during vacations to support their curricular work. Seminars enable students to develop many skills. They develop searching skills through internet, e-journals, books and journals on a specific topic. They also enhance the library reading, writing and presentation skills. Special programmes on humanities, communication skills, computers, foreign languages are offered to students on a regular basis. Two additional courses on career orientation have been added in the curriculum, so that students are sensitized about their potential and can plan their career. National competitions such as ROBOCON, SAE-BAJA, etc. provide the incentive to work beyond classroom hours in interdisciplinary areas.

Fresher's Orientation

The Institute organizes a unique orientation programme of five days for the new entrants. Various lectures on Time Management, Coping with stress, Human relations, Positive attitude, Communication skills, etc. are delivered by eminent speakers to the students. This programme enables the students and faculty to interact with each other, understand each other and it also provides smooth transition from school life to a new environment of professional studies

Sports

- Sports competitions are organized in two phases.
- In the first phase the institute level competition is organized. In the second phase the winner of the institute level competition may participate in inter institute level – university level competition.
- The Winner and runner ups are awarded trophies and certificates.
- The games of sports competition are,
- Volleyball, Football, Cricket, Table Tennis, Carom, Chess, Tug of War, Athletics.

Events of Athletics:

- 100 m, 400 m, 800 m, 1500 m Race, 4 X 100 m Relay Race
- Long Jump, High Jump, Discuss Throw, Shot Put, Javelin Throw



Students' Welfare Board and Institute of Commerce, Nirma University organized 3-days track & field (athletics) events held on November 9-11, 2022.

The Chief Guest for the event was Major General Arvind Kapoor, Additional Director General – NCC – Gujarat Dadra, Nagar Haveli, Daman & Diu and the Guest of Honour was Col Hemant Achyut Joshi, Commanding Officer - 9 Guj NCC. The event was presided by Shri K K Patel, Vice President, Nirma University. Shri G R Nair, Executive Registrar of Nirma University and heads of each institution were present in the programme.

The 3-days track and field event featured institute-level competitions on the first two days and inter-institutional competitions on the third day. The Institute of Law was declared the winner of the inter-institute parade competition that took place on the inaugural. The winners of track and field events were awarded Gold, Silver and Bronze medals.



Cultural activities bring out the creative side of the students and the participation and organisation of these are the best learning experience a student can have. 'Vaudeville', the annual cultural festival of the institute, is a rainbow event with dance, theatre, drama, music lending the colours. Planned as a 'for the students, of the students, by the students' event, the festival is the most awaited event of the year.

Additionally, the University level cultural festival 'NUZEAL' and the Ras-Garba Mahotsav (Ramzat) are star attractions planned during the year. The details are as mentioned below:

Ramzat: Ras-Garba is organized after Navratri festival. All students, staff members, faculty members, HODs and HOIs of constituent institutes of Nirma University and officers of the University join this festival. The winners in different categories are awarded trophies.



Cultural Festival: Cultural Festival is also organized in two phases.

At first phase the institute level competition is organized. At second phase the winner of the institute level competition may participate in inter institute level – university level competition. The Winner and runner ups are awarded trophies and certificates.

The events of the Cultural Festival are,

| | | |
|---------------------|----------------------|----------------|
| Drama | Cartooning | Skit |
| Group Dance | Mime | Solo Dance |
| Mono Acting/Mimicry | Folk Dance | Debate |
| Singing – Solo | Elocution | Singing - Duet |
| Collage | Group Song | Vocal |
| Rangoli | On the spot painting | Instrumental |



Students' Welfare Board

The Students Welfare Board aims to promote the social, cultural and spiritual growth of the students through a host of activities round the year. Annual sports competitions, cultural festivals like Ras-garba, celebration of National days, and social activities such as blood donation drives, Swachh Bharat Abhiyaan, awareness lectures for youth are the recurring features of campus life. Competitions at institute and inter-institute level in sports like cricket, football, volleyball, basketball, kho-kho, kabaddi, lawn tennis, badminton, table tennis, carom, chess, and athletics are held all through the year. Moreover, adventure activities, like mountaineering camps in the Himalayas and desert adventure camps, are also arranged from time to time.

Cultural activities conducted under Students' Welfare Board

The University emphasises on the overall development of the students and extracurricular activities play a vital role in it. Cultural activities lead to the development of many important soft skills, such as resource management, public speaking, teamwork, leadership, and ethics.

The campus is well equipped with the necessary state-of-the-art infrastructure to facilitate all types of cultural activities, including musical performance, dance, theatre, painting, fashion show, etc. NUZEAL, without doubt, is the biggest and most awaited cultural event, organised every year by the University.

Issues like Gender Equality, Exploitation in Education, Importance of Morals and Ethics, Patriotism, Communal Riots, Need for Global Citizenship, Environmental Issues are covered through different cultural events.

The University encourages participation of the students in various state and national level cultural activities held at different institutions and universities across the country.

Garba, the famous dance form of Gujarat, is loved and enjoyed by people from all sections of the society and across all age groups during the Navratri period. The University organises its annual Ras-Garba Mahotsav (RAMZAT) on the first Saturday after Navratri.

Celebration of National Days

On the occasion of Independence Day, the University organises the flag hoisting ceremony at its campus. Renowned dignitaries from the various walks of life are invited as the Chief Guest for the occasion. A patriotic song competition is conducted on this occasion as a mark of respect for our freedom fighters.

The 26 th January is observed as the Republic day in India. On this red-letter day, India was declared as a sovereign nation. On this occasion, the University conducts an array of events, including the flag hoisting ceremony where dignitaries are invited as the Chief Guest, plus an exhibition of photographs shot by University students is opened for all, to name a few.

International Day of Yoga

The United Nations General Assembly declared 21st June as International Day of Yoga. To mark the occasion, the Government of India celebrates this day in a befitting manner all over the country. In the same vein, the University celebrates International Day of Yoga in its campus every year. All University officers, teaching and non-teaching staff, perform yoga under a trainer in the morning.



Sports activities conducted under Students Welfare Board

The University encourages participation of the students in various state and national level sports activities organised at different institutions and universities across the country.

University Annual Sports event, Institute level sports activities, and Inter-University sports tournaments are organised on a regular basis throughout the year. Training camps for sports, adventure camps, mountaineering, etc are planned for the overall development of the students.



Extension Activities

Social innovation can happen only when students are aware of societal problems and their responsibility towards the society. At the Institute, social commitment forms an important part of university life. A number of extension activities are undertaken in the adopted villages by the students throughout the year. Planned exposure to societal needs and problems helps develop civic sense and is done through the mandatory community service course. National service scheme and students level NGO's are other banners under which students contribute to the society.



The National Service Scheme (NSS) is an Indian government-sponsored public service programme conducted by the Ministry of Youth Affairs and Sports. NSS is a voluntary association of students in colleges, universities and at higher secondary schools working for strengthening a campus-community linkage.

The Institute of Technology offers NSS programme for the students. A strong and vibrant 400 plus students NSS unit organizes a number of activities such as teaching children at the adopted villages of Miroli and Motipura, organizing residential camps, awareness drives on societal issues, mentoring and teaching construction workers children, cleanliness drives and many more.



The National Cadet Corps (NCC) has sanctioned a Boys Battalion and a Girls Battalion in Nirma University since 2016 with an aim to motivate students towards nation building. There has been enthusiastic and committed enrollment of students from the Institute of Technology. Various activities like Combined Annual Training Camp (10 days), Army Attachment Camp (15 days), Disaster Management drills and more are conducted throughout the year. Cadets of the Institute have won various competitions during NCC camps at Ahmedabad group level. Cadets also actively coordinate University level activities like celebration of national festivals, Yoga Day, Sports Day and Convocation.



Extension Activity at Institute of Technology, NU is categorized in the following way:

- By the course Community Services of the Curriculum
- By Student Organizations
- By individual faculty / student / staff / NSS Unit
- Nirma Volun Teaching moment

Following are details of the extension activities conducted from Jan 2023 to till date:

| Sr. No. | Name of cultural (youth welfare) activity/event | Date & duration | Organizing club/inst./committee | Short Description of the event |
|---------|---|--|---------------------------------|---|
| 1 | Water Quality Awareness & Road Safety Awareness | 13th April 2023 | NSS | OrCES and NSS organized Water Quality and Road Safety Awareness event to promote awareness on pollution and safe driving. Activities included water testing, educational sessions, and driving skill assessments to cultivate environmental and road safety consciousness. |
| 2 | KADAM 3.0 7- day residential camp at Miroli Village | 23rd April 2023 To 29th April 2023 | NSS & NVM | From April 23rd to April 29th, 2023, Kadam 3.0, organized by NVM & NSS at Miroli, engaged 50 Nirma University students in a week long camp. Activities included rallies, workshops, competitions, surveys, tree plantations, awareness sessions, demonstrations, painting, talent hunts, sports, and felicitations. |
| 3 | Weekly Visit | 7th May 2023 | NSS & NVM | The visit aimed to support underprivileged children in Miroli village by providing education, fostering connections, and promoting holistic development, all while engaging the local community. |

| Sr. No. | Name of cultural (youth welfare) activity/event | Date & duration | Organizing club/inst./committee | Short Description of the event |
|---------|---|---|---------------------------------|--|
| 4 | Weekly Visit | 30th July 2023 | NSS & NVM | The visit was organized to bring joy, education, and community spirit to the children of Miroli village, aiming to foster a sense of belonging and empowerment. Through interactive learning, creative expression, and meaningful connections with Nirma University volunteachers. |
| 5 | Blood Donation Camp | 1st August 2023 | NSS | Nirma University's Blood Donation Camp, organized by the Students' Welfare Board and partners, collected an impressive 288 units despite rainy conditions. Gratitude is extended to donors, volunteers, and sponsors for their invaluable contributions to this noble cause. |
| 6 | Monthly Visit (August) | 6th August 2023 13th August 2023 27th August 2023 | NSS & NVM | In August, Nirma University volunteers embarked on three educational visits to Miroli village, sharing knowledge and joy with the children. Through engaging activities and heartfelt interactions, they forged connections and inspired a love for learning |
| 7 | Monthly Visit (September) | 3rd September 2023 24th September 2023 | NSS & NVM | On two Sundays, Nirma volunteers visited Miroli village, teaching and playing with eager children. New volunteers joined, adding to the enthusiasm. They informed parents about the upcoming 'SAFAR 5.0' event, fostering excitement. |

| Sr. No. | Name of cultural (youth welfare) activity/event | Date & duration | Organizing club/inst./committee | Short Description of the event |
|---------|---|--|---------------------------------|--|
| 8 | SAFAR 5.0 | 3rd October 2023 | NSS & NVM | Nirma Volunteaching Movement and NSS organized SAFAR 5.0, providing underprivileged children from Miroli village a platform at Nirma University. They explored higher education, experienced Team Arro's drones and Stallions Club's vehicles, and celebrated Gujarat's culture with decorated Dandiya, fostering curiosity and unity. |
| 9 | Monthly Visit (October) | 1st October 2023 15th October 2023 29th October 2023 | NSS & NVM | In October, the Nirma Volunteer Movement conducted three visits to Miroli village, welcoming new volunteers. Sessions included prayers, introductions, and assessments. Volunteers left fulfilled, having positively impacted children's lives through education. |
| 10 | TARANG (Panch Prakalp) | 5th November 2023 | NSS & NVM | NVM & NSS hosted TARANG in Miroli on Nov 5, 2023, focusing on cultural and social development. Activities included women empowerment, child education awareness, water conservation, Rangoli making, and a Diya decoration workshop, fostering cultural pride before Diwali. |
| 11 | Monthly Visit (January) | 7th January 2024 21st January 2024 28th January 2024 | NSS & NVM | In January, Nirma Volunteaching Movement organized three successful visits to Miroli village, enriching children's lives through teaching sessions and bonding activities, highlighting the program's ongoing impact. |

| Sr. No. | Name of cultural (youth welfare) activity/event | Date & duration | Organizing club/inst./committee | Short Description of the event |
|---------|---|--|---------------------------------|--|
| 12 | KADAM 4.0 7- day residential camp at Miroli Village | 5th February 2024 To 11th February 2024 | NSS & NVM | The Kadam 4.0 camp, held by Nirma University's NVM & NSS from February 5th to February 11th, 2024, was a memorable experience for all 63 participants. We engaged in workshops, crafting, surveys, and a tree planting drive, fostering camaraderie and leaving us inspired. |
| 13 | Monthly Visit (March) | 3rd March 2024 17th March 2024 31st March 2024 | NSS & NVM | In March, our volunteers visited Miroli village thrice, aiming to uplift its children. We taught, played, and bonded, adding Bhoi Vaas to our outreach. Each visit ended with heartfelt goodbyes, group photos, and a deep sense of fulfillment. |
| 14 | Blood Donation Camp | 25th July 2024 | NSS & NVM | Blood Donation Camp |
| 15 | Regular Visits/ Nirma Volun Teaching (Approximately 25 Nos.) | April 2024 to May 2024 (every 15 days) July 2024 to November 2024 (every 15 days) | NSS & NVM | Volun Teaching in nearby village areas |



SCHEMES OF SCHOLARSHIP

The Nirma University provides scholarship to the meritorious students studying in various Institutes under it on the Merit and Merit-cum-Means basis. To encourage the meritorious students and help the meritorious students on the basis of merit-cum-means the University has decided to provide the scholarships as under:

Scholarship Scheme for the students of BTech. programmes

Category-I: Full Tuition Fee Waiver:

| Branch | All India Category JEE (Mains) CRL Rank | ACPC Merit Rank |
|---|--|--------------------|
| Computer Science and Engineering | 1-5500 | 1-75 |
| Chemical Engineering | 1-20000 | 1-200 |
| Civil Engineering | 1-20000 | 1-200 |
| Electrical Engineering | 1-20000 | 1-200 |
| Electronics and Communication Engineering | 1-20000 | 1-200 |
| Electronics and Instrumentation Engineering | 1-20000 | 1-200 |
| Mechanical Engineering | 1-20000 | 1-200 |

Category-II- Based on Merit:

(A) Department-wise merit:

The Scholarship of Rs. 1,00,000/- p.a will be awarded to eligible students on the basis of JEE (Main)/GUJCET score:

| Branch | Number of Scholarships through All India Category | Number of Scholarships through ACPC |
|---|--|--|
| Chemical Engineering | Top 02 students | Top 01 student |
| Civil Engineering | Top 03 students | Top 02 students |
| Computer Science and Engineering | Top 10 students | Top 05 students |
| Electrical Engineering | Top 03 students | Top 02 students |
| Electronics and Communication Engineering | Top 05 students | Top 02 students |
| Electronics and Instrumentation Engineering | Top 02 students | Top 01 student |
| Mechanical Engineering | Top 03 students | Top 02 students |
| TOTAL | 28 | 15 |

(B) Open Merit: All departments taken together:

The scholarship will be awarded to eligible students on the basis of JEE (Mains)/GUJCET score whose total annual family income from all sources is upto **Rs. 8 Lakh**.

| Details# | Amount (Rs./p.a.) |
|--|---------------------|
| Top 10 students of All India Category admissions based on merit of JEE (Mains) | Rs. 1,00,000/- each |
| Top 05 Students of ACPC Category admissions based on merit of GUJCET | Rs. 1,00,000/- each |

Category-III- Merit-cum-Means:**(A) Department-wise merit:**

The Scholarship of Rs. 1,00,000/- p.a will be awarded to students on the basis of JEE (Mains)/ GUJCET score whose total annual family income from all sources is up to **Rs. 4 lakh**:

| Branch | Number of Scholarships through JEE (Mains) | Number of Scholarships through GUJCET |
|--------------------------------------|--|---------------------------------------|
| Chemical Engineering | 02 | 01 |
| Civil Engineering | 03 | 02 |
| Computer Science and Engineering | 10 | 05 |
| Electrical Engineering | 03 | 02 |
| Electronics and Communication Eng. | 05 | 02 |
| Electronics and Instrumentation Eng. | 02 | 01 |
| Mechanical Engineering | 03 | 02 |
| TOTAL | 28 | 15 |

(B) Open Merit: All departments taken together*:

The scholarship will be awarded to eligible students on the basis of JEE (Mains)/GUJCET score:

| Details | Amount (Rs./p.a.) |
|---|--------------------|
| 35 Top students of All India Category admissions based on JEE (Mains) | Rs. 50,000/- each* |
| 15 Top students of ACPC Category admissions based on GUJCET | Rs. 50,000/- each* |

* The students who are getting 'Mukhymantri Yuva Swavalamban Yojana' (MYSY) scholarship are not eligible for any other scholarships. Hence, to support such students, the University provides financial support for various expenses such as examination fees, books and stationery, transport fees and more up to a maximum of Rs. 50,000/- per annum.

- For BTech AI&ML separate notification will be given related to scholarships.

Important note: The student shall be entitled to get benefit of scholarship under any one of the above mentioned categories subject to fulfillment of eligibility criteria.

Eligibility criteria for continuation/ renewal of the scholarship

Continuation/Renewal of the Scholarship in the subsequent years will be as per University policy which may differ on a semester/year basis. However, it will be subject to meeting of minimum eligibility criteria, as under:

1. During the entire previous year, the conduct of the student should be good
2. No acts or omission which results in unlawful behavior, malafide intention maligning the University brand in digital, print, or social media, promoting, supporting or sharing any content which is against the University brand.
3. No disciplinary action was initiated/sanctioned against the student under the student handbook or compliance with norms as prescribed by the University.
4. The student should maintain merit and get CGPA of 7.0 and above and should have passed all courses of study in the first attempt in the previous year.
5. The student is not caught in unfair means in any of the examinations conducted either by the Institute or University.
6. The student should maintain minimum attendance criteria except the absence with genuine reasons for which the permission of the HoI was obtained particularly in the case of illness.

It will be the responsibility of the applicant to check the eligibility before submitting application. In case the applicant is found non-eligible at any stage, his/her submission or scholarship will be disqualified

The students admitted under Non-Resident Indian (NRI)/NRI- Sponsored or Persons of Indian Origin (PIO), Foreign Nationals (FN) or Children of Indian Workers in Gulf Countries (CIWGC) categories are not be eligible for the scholarships.

The President will have power to make any exception in the above rules framed. However, in case of doubt, if any, in interpretation of any clause, the decision of the President will be final.

Financial Assistance

Interest Free Loan Scholarship (IFLS)

The Nirma University offers financial assistance, by way of loan, to the needy students of the Institute of Technology. The main purpose of this service is to help the needy meritorious students.

1. Assistance of 100 % interest subsidy on the loan, limited to the amount of tuition fees, obtained from the scheduled bank to a maximum of 5% of the total intake of students, and to the students whose family income does not exceed Rs.3.00 lacs per annum.
2. Assistance of 50% interest subsidy on the loan, limited to the amount of tuition fees, obtained from the schedule bank to a maximum of 5% of the total intake of students, and to the students whose family income does not exceed Rs.5.00 lacs per annum.

Book Bank Service

The Library Resource Center also provides book bank facility to the students of Institute of Technology. The main purpose of this service is to help the needy meritorious students.

NIRMA INSTITUTE OF TECHNOLOGY ALUMNI ASSOCIATION (NITAA)

NITAA started free scholarship to the needy students from the NITAA fund since year 2008-09.



AWARD OF NERF MEDALS

NIRMA UNIVERSITY GOLD MEDALS

Nirma University Instituted award of Gold Medals to be awarded for the overall and discipline-wise scholastic performance by the students of different institutions under the University. This medal is awarded for his/her overall scholarship performance in a particular degree by the student and it is awarded during the Convocation of the said degree which will be held by the University. The norms for the same are furnished below:

1. One Gold Medal for each Bachelor's Programme in Technology (B Tech) being run under the Faculty of Technology & Engineering will be awarded to the student who secures 1st position amongst all the students of the respective programme.
2. One Gold Medal for the entire Bachelor's Programmes (B Tech) taken together will be awarded to a student who secures 1st position amongst all the programmes taken together.

The overall PGPA earned at the end of Final Year of programme will be considered.

Norms for award of medals:

1. Pass and Earn all the Credits of all the courses of all the Semesters including supplementary and prerequisite courses of the programme with first attempt within stipulated time of the programme
2. Securing highest PGPA (with minimum PGPA 5.00)
3. No punitive action of any kind is taken against the students for using unfair means at any examination (except warning) or any indiscipline behavior amounting to the major penalty.
4. Minimum Five Pass out students in a programme will be required for consideration of award of medal.

AWARD OF NERF (Nirma Education and Research Foundation) MEDALS

Every year, NERF medals are awarded to the students of different Institute for their scholastic performance. These medals are awarded to the student who perform well in both the semesters in a year and reached the top position. To achieve these medals, the students are required to meet certain norms as prescribed by the University which is subject to amendment by the competent authority from time. In addition to this, students are also recognized with awards and certificates for their skills in curricular, co-curricular and extra-curricular activities. These medals and certificates are normally given during the Foundation Day Celebrations of the Institute.

GUIDELINES FOR SHOWING THE ASSESSED ANSWER BOOKS

- 1 The process of showing the assessed answer books after the declaration of results should be completed within the first week of commencement of the next semester as per the announcement of Academic Calendar or in the first week after the declaration of the result whichever is later.
- 2 Examination Section will prepare a notice of showing the assessed answer books to the student as per Academic Calendar of the concerned Institute and inform the students on the last day of Semester End Examination along with the fee circular and same notice will be put on website and notice board for the information of the students.
- 3 HOI concerned will appoint the Coordinator of Assessment Cell (not below the level of Associate Professor) with supporting staff.
- 4 Till the said process gets over, the custody of the assessed answer books will remain with the Institute under the supervision of Coordinator of Assessment Cell.
- 5 Modality of showing the assessed answer books in the class room to the interested students should be decided by the concerned HOIs.**
- 6 The Convener / Co-examiner will take due care while showing the assessed answer books to the students to avoid any Unfair-means used or answer book does not lost for which the person who is assigned the job will take care with the help of Assistant / Laboratory Assistant as a supporting staff can be provided by HOI / HOD.
- 7 The re-evaluation is permitted in the Semester End Examination / Supplementary Examination for Theory courses as per university norms on chargeable basis.**
- 8 As per modality decided by the HOI, Coordinator of Assessment Cell with the help of supporting staff of the cell will issue the sealed packet of the assessed answer books to the concerned Convener / Co-examiner for showing the assessed answer books to the interested students and maintain the issue register mentioning number of assessed answer books given and will also the assessed answer books received in the same number. Both issuing authority and receiving authority will sign the register.
- 9 While showing the assessed answer books to the students if any mistake is found by the person showing the assessed answer book pertaining to totalling of marks, carry forwarding the marks from inside to front page and unassessed answer will report in prescribed format to the Coordinator of Assessment Cell along with such answer books and remaining assessed answer books should be kept in the sealed packet and give back to the Coordinator of Assessment Cell. Prescribed format is attached herewith for reporting

All cases of correction should be sent to the Dy. Registrar (Examination) in sealed cover on the same day for further process.

3.

Teaching and Examination Scheme of B Tech Semester I & II (All programmes)

As per NEP 2020

TEACHING AND EXAMINATION SCHEME

B TECH. SEMESTER – I/II

(to be made effective for student admitted in 2023-24)

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-----------------------|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Mathematics I | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 2 | Physics | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Environmental Science | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 4 | Computer Programming | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Electrical Science | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | General English | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| | Total | 12 | 02 | 08 | 18 | | | | |

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits

LPW/PW: Laboratory / Project Work

SEE: Semester End Examination

CE: Continuous Evaluation

B TECH. SEMESTER – II/I

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Mathematics II | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 2 | Chemistry/ Introduction to Web programming* | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Engineering Drawing & Workshop | 1 | - | 4 | 3 | - | 0.6 | 0.4 | - |
| 4 | Written Communication | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 5 | Introduction to AI&ML | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Statistics | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 7 | Contemporary India | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 13 | 03 | 10 | 21 | | | | |

* Applicable to CSE and Integrated BTech (CSE)- MBA and AI&ML branches

Note: Looking to the strength of BTech. FY, students will be divided in 02 groups. A supplementary course on 'Yoga' will be offered group wise in any one semester.

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits

LPW/PW: Laboratory / Project Work

SEE: Semester End Examination

CE: Continuous Evaluation

4.

Teaching and Examination Scheme of B Tech Semester III & IV (All programmes)

As per NEP 2020

Bachelor of Technology (Artificial Intelligence & Machine Learning)

Semester-III

w.e.f A. Y. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---|---------------------------------|----------|----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Data Structures | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Object Oriented Programming | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Digital Electronics | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Mathematical Foundations for Computer Science | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 5 | Economics | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 7 | Internship-Community Services | - | - | - | 3 | - | 1.0 | - | - |
| | Total | 12 | 3 | 6 | 21 | | | | |

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

Bachelor of Technology
(Artificial Intelligence & Machine Learning)
Semester-IV

w.e.f A. Y. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-----------------------------------|------------------------------|-----------|----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Computer Architecture | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 2 | Database Management Systems | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Operating Systems | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Machine Learning | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Organizational Behavior | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Design and Analysis of Algorithms | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| | Total | 12 | 02 | 8 | 18 | | | | |

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

Bachelor of Technology
(Artificial Intelligence & Machine Learning)
Semester-V

w. e. f. A. Y. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|--------------|--|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Data Communication and Network | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Deep Learning | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Artificial Intelligence | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Department Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Computational Mathematics for AIML. (Specialization core) | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 6 | Machine Learning operations. (Specialization core) | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 24 | | | | |

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

Bachelor of Technology
(Artificial Intelligence & Machine Learning)
Semester-VI

w. e. f. A. Y. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Natural Language Computing (Specialization core) | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Software Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Research Methodology* | 2 | 0 | 0 | - | - | 0.5 | - | - |
| 4 | Department Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Interdisciplinary Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 6 | Vision using Deep Learning | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| 7 | (Specialization core) | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 0 | 4 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| | Total | - | - | - | 20 | | | | |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

Bachelor of Technology
(Artificial Intelligence & Machine Learning)
Semester-VII

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Ethics for AI | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Research Methodology* | 0 | 0 | 4 | 4 | - | - | 0.5 | - |
| 3 | Department Elective-III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 4 | Department Elective-IV | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Interdisciplinary Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| | Total | - | - | - | 20 | | | | |
| 6 | Internship | | | | | | | | |
| | Summer Internship** | - | - | - | 6 | | | | |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

**Bachelor of Technology
(Artificial Intelligence & Machine Learning)
Semester-VIII**

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------------------------|----------------------------------|---------------------------------|---|---|----|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Internship / Research Project | - | - | - | 12 | - | - | 1 | - |
| Total Credits = 12 | | | | | | | | | |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

NIRMA UNIVERSITY
Institute of Technology
Teaching & Examination Scheme
Bachelor of Technology (Chemical Engineering)
Semester-III

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|--------------------------------------|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Heat Transfer Operations | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Solid Fluid Operations | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Fluid Flow Operations | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Mathematics for Chemical Engineering | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 5 | Organizational Behaviour | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Process Calculations | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 03 | 06 | 18 | | | | |
| 7 | Internship-Community Services* | 0 | 0 | 6 | 3 | - | 1 | - | - |

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits**LPW/PW:** Laboratory / Project Work**SEE:** Semester End Examination**CE:** Continuous Evaluation

* Internship related to community services to be performed during the summer break

Bachelor of Technology (Chemical Engineering) Semester-IV

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|-------------------------------------|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Mass Transfer Operations-I | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Chemical Process Industries | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Organic Chemistry | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Chemical Engineering Thermodynamics | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 5 | Economics | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 03 | 06 | 18 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate – I | 1 | - | - | - | - | 1 | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

Bachelor of Technology (Chemical Engineering) Semester-V

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|-------------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Mass Transfer Operations – II | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Instrumentation and Process Control | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Chemical Reaction Engineering – I | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Petroleum Refining Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Modelling & Process Simulations | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Dept. Elective – I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| | Total | - | - | - | 24 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate – II | 1 | - | - | - | - | 1 | - | - |

Bachelor of Technology (Chemical Engineering) Semester-VI

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-------------------|---|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Chemical Reaction Engineering – II | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Process Equipment Design | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Environmental Pollution Control and Safety Management | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Research Methodology and Seminar* | 2 | 0 | 0 | - | - | - | - | - |
| 5 | Department Elective – II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 6 | Open Elective – I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 20 | - | - | - | - |
| Internship | | | | | | | | | |
| 7 | Summer Internship** | - | - | - | 6 | - | 1 | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Chemical Engineering) Semester-VII

w.e.f. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|--------------|---|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Plant Design Economics and Process Management | 3 | 1 | - | 4 | 3 | 0.6 | - | 0.4 |
| 2 | Research Methodology and Seminar* | 0 | 0 | 4 | 4 | - | 0.5 | 0.5 | - |
| 3 | Department Elective – III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 4 | Open Elective – II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Open Elective - III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 20 | - | - | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

Bachelor of Thechnology (Chemical Engineering) Semester-VIII

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------------------------|----------------------------------|---------------------------------|---|---|----|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Internship / Research Project | - | - | - | 12 | - | - | 1 | - |
| Total Credits = 12 | | | | | | | | | |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

NIRMA UNIVERSITY
Institute of Technology
Teaching & Examination Scheme
Bachelor of Technology (Civil Engineering)
Semester-III

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---|------------------------------|----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Mechanics of Solids | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Surveying | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Construction Materials | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Mathematics for Civil Engineers | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Civil Engineering Drawing and Building Planning | 1 | 0 | 4 | 3 | - | - | 1 | - |
| 6 | Organizational Behaviour | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 11 | 1 | 12 | 18 | | | | |
| 7 | Internship-Community Services* | 0 | 0 | 6 | 3 | - | 1 | - | - |

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits**LPW/PW:** Laboratory / Project Work**SEE:** Semester End Examination**CE:** Continuous Evaluation

Bachelor of Technology (Civil Engineering) Semester-IV

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|--|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Structural Mechanics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Construction Technology | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Geotechnical Engineering | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Fluid Mechanics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Economics | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 02 | 08 | 18 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate-I | 1 | - | - | - | - | 1 | - | - |
| 8 | Testing of Geotextiles for Infrastructure Applications | - | - | 2 | - | - | - | 1 | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Civil Engineering) Semester-IV

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|--|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Structural Mechanics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Construction Technology | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Geotechnical Engineering | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Fluid Mechanics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Economics | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 02 | 08 | 18 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate-I | 1 | - | - | - | - | 1 | - | - |
| 8 | Testing of Geotextiles for Infrastructure Applications | - | - | 2 | - | - | - | 1 | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Civil Engineering) Semester-V

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|-------------------------------|---------------------------------|---|---|-----------|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Design of Concrete Structures | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Water Resources Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Environmental Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Foundation Engineering | 3 | 0 | 2 | 4 | 3 | 0.6 | - | 0.4 |
| 5 | Transportation Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Department Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| | Total | - | - | - | 24 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate-II | 1 | - | - | - | - | 1 | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Civil Engineering) Semester-VI

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---------------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Construction Project Management | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Design of Steel Structures | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Port, Airport and Railway Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Research Methodology and Seminar* | 2 | 0 | 0 | - | - | - | - | - |
| 5 | Department Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| 6 | Open Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| | Total | - | - | - | 20 | - | - | - | - |
| 7 | Summer Internship** | - | - | - | 6 | | 1 | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Civil Engineering) Semester-VII

w.e.f. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-----------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Professional Practice | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Research Methodology and Seminar* | 0 | 0 | 4 | 4 | - | 0.5 | 0.5 | - |
| 3 | Department Elective- III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 4 | Open Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Open Elective-III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| | Total | - | - | - | 20 | - | - | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Civil Engineering) Semester-VIII

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------------------------|----------------------------------|---------------------------------|---|---|----|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Internship / Research Project | - | - | - | 12 | - | - | 1 | - |
| Total Credits = 12 | | | | | | | | | |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
Teaching & Examination Scheme
Bachelor of Technology (Computer Science and Engineering)
SEMESTER – III

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---|------------------------------|----------|----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Data Structures | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Object Oriented Programming | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Digital Electronics | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Mathematical Foundations for Computer Science | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 5 | Economics | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 7 | Internship-Community Services | - | - | - | 3 | - | 1.0 | - | - |
| | Total | 12 | 3 | 6 | 21 | | | | |
| 8 | Mandatory course (Campus to corporate-I) | 1 | - | - | - | | | | |

Bachelor of Technology (Computer Science and Engineering) Semester-IV

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-----------------------------|------------------------------|-----------|----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Computer Architecture | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 2 | Database Management Systems | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Operating Systems | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Java Programming | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Data Communication | 2 | - | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Organisational Behavior | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 02 | 8 | 18 | | | | |

Bachelor of Technology (Computer Science and Engineering) Semester-V

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-----------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Machine Learning | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Computer Networks | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Design and Analysis of Algorithms | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Department Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Microprocessor and Interfacing | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Full Stack Development | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| | Total | - | - | - | 24 | | | | |

Bachelor of Technology (Computer Science and Engineering) Semester-VI

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Cloud Computing | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Software Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Research Methodology and Seminar* | 2 | 0 | 0 | - | - | - | - | - |
| 4 | Department Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Hardware Programming | 2 | 0 | 4 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Open Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| | Total | - | - | - | 20 | | | | |
| 7 | Mandatory course (Campus to corporate-II) | 1 | - | - | - | | | | |
| 8 | **Summer Internship | - | - | - | 6 | - | - | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

Bachelor of Technology (Computer Science and Engineering) Semester-VII

w.e.f. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|--------------|-----------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Principles of Compiler Design | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Research Methodology and Seminar* | 0 | 0 | 4 | 4 | - | 1.0 | - | - |
| 3 | Department Elective-III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 4 | Open Elective - II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Open Elective - III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 0 | 4 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 20 | | | | |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

Bachelor of Technology (Computer Science and Engineering) Semester-VIII

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------------------------|----------------------------------|---------------------------------|---|---|----|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Internship / Research Project | - | - | - | 12 | - | - | 1 | - |
| Total Credits = 12 | | | | | | | | | |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
Teaching & Examination Scheme
Bachelor of Technology (Electronics & Communication Engineering)
SEMESTER – III

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|---|------------------------------|----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Electronic Devices | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Digital Logic Design | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Network Theory | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 4 | Mathematics for Electronics & Communication Engineering | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 5 | Economics | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 4 | 04 | 18 | | | | |
| Internship | | | | | | | | | |
| 7 | Internship-Community Services* | 0 | 0 | 6 | 3 | - | 1.0 | - | - |
| | Total | | | | 21 | | | | |
| Supplementary Course | | | | | | | | | |
| 8 | Campus to Corporate-I | 1 | - | - | - | - | 1 | - | - |

Bachelor of Technology (Electronics & Communication Engineering)

Semester-IV

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|--------------------------|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Electronics Circuits | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Signals and Systems | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 3 | Integrated Electronics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Communication Systems | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | FPGA based System Design | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Organizational Behaviour | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 02 | 08 | 18 | - | - | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

Bachelor of Technology (Electronics & Communication Engineering)

Semester-V

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|--------------|------------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | VLSI Design | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Digital Communication | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Electromagnetic & Wave Propagation | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Digital Signal Processing | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Microcontroller and Interfacing | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Department Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 24 | - | - | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

Bachelor of Technology (Electronics & Communication Engineering)

Semester-VI

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|-----------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Computer Architecture | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Embedded Systems | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Microwave and Antenna Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Research Methodology and Seminar* | 2 | 0 | 0 | 0 | - | - | - | - |
| 5 | Department Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 6 | Open Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 20 | - | - | - | - |
| Internship | | | | | | | | | |
| 7 | Summer Internship** | - | - | - | 6 | | 1 | - | - |
| Supplementary Course | | | | | | | | | |
| 8 | Campus to Corporate-II | 1 | - | - | - | - | 1 | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electronics & Communication Engineering) Semester-VII

w.e.f. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-----------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Data Communication & Networks | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Research Methodology and Seminar* | 0 | 0 | 4 | 4 | - | 0.5 | 0.5 | - |
| 3 | Department Elective- III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 4 | Open Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Open Elective-III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| | Total | - | - | - | 20 | - | - | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

L: Lectures, **P/T:** Practicals / Tutorial, **C:** Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

Bachelor of Technology (Electronics & Communication Engineering) Semester-VIII

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------------------------|----------------------------------|---------------------------------|---|---|----|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Internship / Research Project | - | - | - | 12 | - | - | 1 | - |
| Total Credits = 12 | | | | | | | | | |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
Teaching & Examination Scheme
Bachelor of Technology (Electrical Engineering)
SEMESTER – III

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---|------------------------------|----------|----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Mathematical Applications in Electrical Engineering | 2 | 1 | - | 3 | 3 | 0.6 | - | 0.4 |
| 2 | Analog Electronics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Digital Electronics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Electrical Measurements and Transducers | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Network Analysis | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Economics | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 7 | Internship - Community Services* | 0 | 0 | 6 | 3 | - | 1 | - | - |
| | Total | 12 | 2 | 8 | 21 | | | | |

* At the end of the second semester, during summer break, the students are required to undergo a Community Internship.

Bachelor of Technology (Electrical Engineering) Semester-IV

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|-------------------------------------|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Fundamentals of Power System | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Transformers and DC Machines | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Microprocessor and Microcontrollers | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Control System Theory | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Organisational Behaviour | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 02 | 08 | 18 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate-I | 1 | - | - | - | - | 1 | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electrical Engineering) Semester-V

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|---|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Rotating AC Machines | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Electrical Power System Analysis | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Power Electronics and Applications | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Power System Protection and Switchgears | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Utilization of Electric Power | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Department Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 24 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate-II | 1 | - | - | - | - | 1 | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electrical Engineering) Semester-VI

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-------------------|------------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Power System Operation and Control | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Electric Drives | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Electronic System Design | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Research Methodology and Seminar* | 0 | 0 | 2 | - | - | - | - | - |
| 5 | Department Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| 6 | Open Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| | Total | - | - | - | 20 | - | - | - | - |
| Internship | | | | | | | | | |
| 7 | Summer Internship** | - | - | - | 6 | | 1 | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII and its evaluation will be done during Sem. VII

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electrical Engineering) Semester-VII

w.e.f. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-----------------------------------|------------------------------|----------|----------|-----------|--------------------|---------------------|------------|------------|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Electrical Machine Design | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Research Methodology and Seminar* | 2 | 0 | 2 | 4 | - | 0.5 | 0.5 | - |
| 3 | Department Elective- III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 4 | Open Elective-III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Open Elective-III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| | Total | 3 | 0 | 2 | 20 | - | 0.3 | 0.3 | 0.4 |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electrical Engineering) Semester-VIII

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------------------------|----------------------------------|---------------------------------|---|---|----|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Internship / Research Project | - | - | - | 12 | - | - | 1 | - |
| Total Credits = 12 | | | | | | | | | |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
Teaching & Examination Scheme
Bachelor of Technology (Electronics and Instrumentation Engineering)
SEMESTER – III

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|---|------------------------------|----------|----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Control Theory | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 2 | Basic Electronics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Circuit Theory | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Software For Engineers | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Mathematics for Electronics and Instrumentation Engineers | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Economics | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 2 | 8 | 18 | | | | |
| 7 | Internship-Community Services* | 0 | 0 | 6 | 3 | - | 1 | - | - |
| Supplementary Course | | | | | | | | | |
| 8 | Campus to Corporate-I | 1 | - | - | - | - | 1 | - | - |

* At the end of the second semester, during summer break, the students are required to undergo a Community Internship.

Bachelor of Technology (Electronics and Instrumentation Engineering) Semester-IV

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|--------------------------------------|------------------------------|-----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Applied Electronics | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Electronic Circuits | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Microcontroller and its Applications | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Programmable Logic Controllers | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Organizational Behaviours | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 02 | 08 | 18 | - | - | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electronics and Instrumentation Engineering) Semester-V

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|---------------------------------------|------------------------------|----------|-----------|-----------|--------------------|---------------------|----------|----------|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Industrial Controls | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Transducers and Measurement | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Industrial Drives | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Fundamentals of Robotics | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Image Processing and its Applications | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Department Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| | Total | 18 | 0 | 12 | 24 | - | - | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electronics and Instrumentation Engineering) Semester-VI

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|-----------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Industrial Instrumentation | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Process Automation | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | AI for Automation | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Research Methodology and Seminar* | 2 | 0 | 0 | - | - | - | - | - |
| 5 | Department Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 6 | Open Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 20 | - | - | - | - |
| Internship | | | | | | | | | |
| 7 | Summer Internship** | - | - | - | 6 | | 1 | - | - |
| Supplementary Course | | | | | | | | | |
| 8 | Campus to Corporate-II | 1 | - | - | - | - | 1 | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electronics and Instrumentation Engineering) Semester-VII

w.e.f. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|-----------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|------|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Embedded System Design | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Research Methodology and Seminar* | 0 | 0 | 4 | 4 | - | 0.5 | | 0.5- |
| 3 | Department Elective- III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| 4 | Open Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| 5 | Open Elective-III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | | | 0.3 | 0.3 | 0.4 |
| | | 2 | 1 | 2 | | | 0.3 | 0.3 | 0.4 |
| | Total | - | - | - | 20 | - | - | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Electronics and Instrumentation Engineering) Semester-VIII

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------------------------|----------------------------------|---------------------------------|---|---|----|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Internship / Research Project | - | - | - | 12 | - | - | 1 | - |
| Total Credits = 12 | | | | | | | | | |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
Teaching & Examination Scheme
Bachelor of Technology (Mechanical Engineering)
SEMESTER – III

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------|--|------------------------------|----------|-----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Mechanics of Solids | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Manufacturing Processes-I | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Material Science and Engineering | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Mathematics for Mechanical Engineers | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 5 | Industrial Drafting and Machine Element Design | 1 | 0 | 4 | 3 | - | 0.6 | 0.4 | - |
| 6 | Organizational Behaviour | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 11 | 2 | 10 | 18 | | | | |
| 7 | Internship-Community Services* | 0 | 0 | 6 | 3 | - | 1 | - | - |

Bachelor of Technology (Mechanical Engineering) Semester-IV

w.e.f. 2025-26

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|-------------------------------------|------------------------------|----------|----------|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Theory of Machines | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Manufacturing Processes-II | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Metrology and Quality Control | 2 | 0 | 2 | 3 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Thermodynamics | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 5 | Economics | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| 6 | Indian Constitution and Citizenship | 2 | 1 | 0 | 3 | 3 | 0.6 | - | 0.4 |
| | Total | 12 | 3 | 6 | 18 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate-I | 1 | - | - | - | - | 1 | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Mechanical Engineering) Semester-V

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-----------------------------|--------------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Dynamics of Machines | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Machine Design –I | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Fluid Mechanics and Fluid Power | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Heat and Mass Transfer | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 5 | Production Technology and Management | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 6 | Department Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| | Total | - | - | - | 24 | - | - | - | - |
| Supplementary Course | | | | | | | | | |
| 7 | Campus to Corporate-II | 1 | - | - | - | - | 1 | - | - |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Mechanical Engineering) Semester-VI

w.e.f. 2026-27

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|-------------------|--|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Machine Design-II | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Power Plant and Renewable Energy Systems | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 3 | Applied Thermal Engineering | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 4 | Research Methodology and Seminar* | 2 | 0 | 0 | - | - | - | - | - |
| 5 | Department Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 6 | Open Elective-I | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 20 | - | - | - | - |
| Internship | | | | | | | | | |
| 7 | Summer Internship** | - | - | - | 6 | | 1 | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

L: Lectures, P/T: Practicals / Tutorials, C: Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Mechanical Engineering) Semester-VII

w.e.f. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|--------------|-----------------------------------|------------------------------|---|---|-----------|--------------------|---------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Computer Integrated Manufacturing | 3 | 0 | 2 | 4 | 3 | 0.3 | 0.3 | 0.4 |
| 2 | Research Methodology and Seminar* | 0 | 0 | 4 | 4 | - | 0.5 | 0.5 | - |
| 3 | Department Elective- III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 4 | Open Elective-II | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| 5 | Open Elective-III | 3 | 1 | 0 | 4 | 3 | 0.6 | - | 0.4 |
| | | 3 | 0 | 2 | 0.3 | | 0.3 | 0.4 | |
| | | 2 | 1 | 2 | 0.3 | | 0.3 | 0.4 | |
| Total | | - | - | - | 20 | - | - | - | - |

*The course will be spread over two semesters (semester 6 and semester 7). 4 credits will be awarded on successful completion of examination components at the end of semester 7.

**Compulsory Summer Internship of 6 weeks duration in summer break between Semester VI and VII

L: Lectures, P/T: Practicals / Tutorials, C: Credits
LPW/PW: Laboratory / Project Work

SEE: Semester End Examination
CE: Continuous Evaluation

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

Bachelor of Technology (Mechanical Engineering) Semester-VIII

w. e. f. A. Y. 2027-28

| Sr. No. | Course Name | Teaching Scheme (hours/week) | | | | Examination Scheme | | | |
|---------------------------|----------------------------------|---------------------------------|---|---|----|--------------------|------------------------|-----|-----|
| | | L | T | P | C | Duration Hours | Component Weightage | | |
| | | | | | | SEE | CE | PWE | SEE |
| 1 | Internship / Research Project | - | - | - | 12 | - | - | 1 | - |
| Total Credits = 12 | | | | | | | | | |

w.e.f. for first year students admitted in 2024-25 and D to D students admitted in 2025-26 onwards

*** Note: The Teaching and Examination Scheme of Minor Courses will be notified after approval.**

5. Academic Rules and Regulations

ACADEMIC RULES AND REGULATIONS

* ACADEMIC REGULATIONS FOR UNDER GRADUATE DEGREE PROGRAMMES (B TECH.) UNDER FACULTY OF TECHNOLOGY AND ENGINEERING

SHORT TITLE, APPLICATION AND COMMENCEMENT:

- a) These regulations shall be called as Academic Regulations for B Tech. programmes, under the Faculty of Technology & Engineering.
- b) They shall apply to all students admitted in B Tech. programmes under The Faculty of Technology & Engineering, Nirma University.
- c) They shall come into force from the date of their publication of the notification with the approval of Board of Governors, Nirma University.

DEFINITIONS: IN THESE REGULATIONS, UNLESS THE CONTEXT OTHERWISE REQUIRES:

| | | |
|------------------|---|--|
| Programme | - | It is an undergraduate degree programme |
| Course | - | A constituent subject of the programme |
| Semester/Term | - | Duration for studying a course/s i.e. a portion of an academic year. The word "Term" is generally used synonymously with "Semester". |
| Registration | - | Procedure to register a course/s in a semester for the purpose of study or appearance in examination. |
| Letter Grade | - | A letter associated with a particular performance level of a student in a course. A qualitative meaning and numerical figures are attached to each grade. |
| Credit | - | A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week. On passing a course, a student will earn this "credit". |
| Appeal Committee | - | A Committee consisting of Director, Head of the Department and two senior faculty members nominated by the Director. |

SHORT FORMS

| | | |
|---------------|---|--|
| The Institute | - | The Institute of Technology |
| The Director | - | The Director, Institute of Technology |
| Faculty | - | Faculty of Technology & Engineering |
| The Dean | - | The Dean, Faculty of Technology & Engineering |
| CEE | - | Continuous Evaluation Examination |
| PWE | - | Practical Work Examination |
| SEE | - | Semester End Examination |
| SPE | - | Supplementary Examination |
| IR | - | Initial Registration |
| RR | - | Repeat Registration |
| RS | - | Repeat Registration for Studying all components of a course |
| RRE | - | Repeat Registration Examination |
| RRC | - | Repeat Registration for Examination of continuous evaluation component of a course |
| RRP | - | Repeat Registration for Examination of Practical/Lab work of a course |
| RRS | - | Repeat Registration for Semester End Examination of a course |
| GPA | - | Grade Point Average |
| SGPA | - | Semester Grade Point Average |
| PGPA | - | Programme Grade Point Average |
| CGPA | - | Cumulative Grade Point Average |
| R.ENG(UG) | - | Regulation of Technology & Engineering (Undergraduate Programme) |

R.ENG(UG) 1: THE PROGRAMMES

The Undergraduate Degree Programmes in Technology & Engineering leading to the Bachelor of Technology (B Tech) Degrees offered by the Institute of Technology, Nirma University under the Faculty of Technology & Engineering. The programmes are full time and of four-year duration. The medium of instruction of the programmes is English (Annexure-I).

R.ENG(UG) 2: ELIGIBILITY CRITERIA AND DETERMINATION OF

MERIT FOR ADMISSION

The Eligibility criteria and criteria for determination of merit for the admission in the First Year of Bachelor of Technology programmes under the Faculty of Technology & Engineering, Nirma University shall be as per Annexure-II.

R.ENG(UG) 3: CATEGORIES OF COURSES

The following categories of courses are offered in the programme which may also be part of major and minor.

3.1 Core Courses:

The courses to be compulsorily studied by the students as a core requirement to complete the academic requirement of a programme as prescribed by the Academic Council.

3.2 Elective courses:

Elective course is a course which can be chosen from a pool of Courses. It may be:

- Supportive to the discipline of study
- Providing an expanded scope
- Enabling an exposure to some other discipline/domain
- Nurturing student's proficiency/skill

An elective may be "Generic Elective" focusing on those courses which add generic proficiency to the students. An elective may be "Discipline centric" which may include the elective offered for major and minor or may be chosen from another discipline.

3.3 Dissertation:

A candidate studies such a course with an advisory support by a teacher/expert in the concerned field is called dissertation it may be offered as a core course or elective course depending upon the Teaching and Examination scheme approved by the Academic Council from time to time.

3.4 Project(s)/Internship(s):

All students will have to complete project(s)/internship(s) with a social or an industrial or business or service or a foreign organization for a duration as prescribed in the Teaching and Examination Scheme with an objective to provide professional learning experience and/or that offers meaningful practical work related to a student's field of study or career interest or any field.

3.5 Value Added Courses:

They are offered to the students to provide an additional exposure to certain skills/knowledge. This is a Non-credit course. The Dean is empowered to decide these courses, their curriculum, teaching and examination schemes, passing standards, etc. in accordance with the value-added course policy approved by the Academic Council and from the list of courses approved by the Academic Council.

3.6 Audit Courses:

These are optional courses. Audit courses are not evaluated for the purpose of assessing the academic performance of the students and no grade will be awarded for these courses.

3.7 Vocational Course:

Vocational courses are career/job-oriented courses prepares learners for jobs that are based in manual or practical activities. These courses are traditionally non-academic and totally related to a specific trade, occupation or vocation.

R.ENG(UG) 4: COMPONENTS OF A COURSE

The academic schedule of the courses may consist of one or more of the following components with their respective scope as described.

4.1 Lecture:

Teaching learning sessions conducted through real and virtual classrooms with various multimedia aids and other forms of students learning engagements as per requirement of the course and approved by the Dean.

4.2 Tutorials:

Supplementary to classroom teaching tutorials are conducted as per Nirma University Tutorial Policy and as amended from time to time.

4.3 Project Work / Practical Work/ Studio/Workshop/Field work:

The students will be engaged in research or Practical Work pertaining to a course.

R.ENG(UG) 5: CO-ORDINATORS

5.1 Course Coordinator (to be nominated by the Dean for each course):

To coordinate all matters related to the conduct and assessment of a course.

5.2 Examination Co-ordinator (to be nominated by the Dean):

To look after all matters regarding Registrations and Re-registrations of courses and also to provide guidance and counselling to students regarding these issues.

R.ENG(UG) 6: TEACHING AND EXAMINATION SCHEME

6.1 Teaching Scheme:

The scheme of teaching in a semester as a whole will be referred as Teaching and Examination Scheme.

The schemes show the various courses, distribution of teaching hours, course component/s, examination components and their weightages and credits allotted to each course.

The courses offered in each programme (Semester wise) and their teaching schemes are given in the Semester Schedules approved by the Academic Council from time to time on recommendation of Faculty of Technology & Engineering.

6.2 Examination Scheme:

For assessment of a course, a student is assessed on following components:

- (a) Continuous Evaluation Examination (CEE) - that includes several sub-components such as Quiz/Test, Assignment, comprehensive Viva, Project (Group/ individual), etc. All exercise in CEE will be continuously assessed during the semester and given marks.
- (b) Practical Work Examination (PWE) – that includes several subcomponents as per the practical work policy of institute of Technology. All assignments in practical work will be continuously/ periodically assessed (as applicable) during the semester.
- (c) Semester End Examination (SEE) which will be conducted at the end of the semester/term. The SEE covers the entire syllabus of the course.

The course in each programme (semester-wise) and their examination scheme along with the teaching scheme are given in the Semester Schedules approved by the Academic Council from time to time on recommendation of Faculty of Technology & Engineering.

The assessment of sub-components of courses for CEE & PWE differ depending upon the nature and the teaching scheme of the concerned course. The detailed assessment scheme of the CEE, PWE and SEE for each course will be finalized and notified in form of course outline by the Dean in accordance with the assessment policy approved by the Academic Council.

R.ENG(UG) 7: REGISTRATION IN COURSES

Registration:

There are two categories of registration, Initial Registration (IR) and Repeat Registration (RR). All categories of registration will collectively be referred to simply as Registration. Registration will be done for each course. All Registration, wherever applicable, will be subject to the availability of courses. Students' registration in a Semester will be in chronological order.

Categories of Registration:

7.1 Initial Registration (IR):

In order to study a course for the first time, the student will register under the IR category. This will imply regular attendance for study of all components of that course and appearing at all examinations thereof. IR registration for courses of a Semester are to be done for all courses of that Semester as shown in the Teaching Scheme; Generally, IR registration will not be permitted for lesser number of courses. The student who so registers (IR) for all courses of a Semester will be considered as having been registered in that Semester.

7.2 Repeat Registration (RR):

Repeat registration is consisting of following categories of registrations;

7.2.1 Repeat Registration for Study of a course (RS):

This category will imply regular attendance (as per R.ENG(UG) 8) to study all components (i.e. LT, CE, PW as applicable) and appearing at all examinations thereof. The student has to seek fresh registration for this category and will be subject to the availability of the course/s.

7.2.2 Repeat Registration for Examination (RRE):

This registration is necessary for appearing again in a particular examination of a course. It will not involve regular attendance for studying the course.

Repeat Registration for Examination will be in the following categories:

- (a) Repeat Registration for the Examinations of Continuous Evaluation component of a course (RRC)
- (b) Repeat Registration for the Examination of Practical /Lab Work (RRP)
- (c) Repeat Registration for Semester End Examination of a course (RRS).

7.3 Approval of Registration:

Every student must apply in the prescribed format for registrations, as applicable. The decision on the student's request will be based on the availability of courses and applicable Regulations. The

Dean will issue appropriate orders for processing the application, including scrutiny, verification and final orders.

R.ENG(UG) 8: ATTENDANCE REQUIREMENT FOR APPEARANCE AT SEMESTER END EXAMINATION

A student has to comply with the following condition course wise to be eligible to admit for SEE:

8.1 Attendance:

Students under category of (IR, RS) should have at least 85% attendance, including Academic Leave in all teaching components of the course (as applicable).

8.2 Appeal Committee:

A student who has not met with attendance requirement of any course may appeal to the Appeal Committee giving full reasons for his/her default. The decision of the Committee in all such cases will be final. The student will be allowed to appear in the examination of the course only if the appeal committee condones the deficiency.

If the committee rejects the appeal of the student, then the student will not be permitted to appear in SEE of the concerned course. Accordingly, S/he will also be given grade F in that course and S/he will have to seek RS category registration.

R.ENG(UG) 9: SCOPE OF EXAMINATIONS AND ASSESSMENT

The scope of examinations and the method of assessment are as follows:

9.1 Continuous Evaluation Examination – CEE (IR & RR Registration):

The learning of the students will be continuously assessed during the Semester for each component using marks/scores. The total marks of components of continuous evaluation will be aggregated based on their inter se weights to give the overall percentage of marks in the CEE examination.

If a student fails in CEE, the student will not be permitted to appear in SEE of that course and the student will have to seek RRC.

9.2 PW Examination (IR and RR Registration):

All assignments of a course in Practical Work will be continuously / periodically assessed (as applicable) during a semester. Each assessment will be given marks. The total marks of all Units of PW will be aggregated based on their inter se weights to give the overall percentage of marks in the PW examination. The course coordinator will notify the procedure for assessment, review, viva voce, etc. to the students in advance.

If the student fails in PW examination, the student will not be permitted to appear in SEE of that course and the student will have to seek registration as RRP in subsequent semester.

9.3 Semester End Examination (IR & RR Registration):

The expression 'Semester End Examination' refers to the Hall Examination of a course taken at the end of a Semester. The SEE of a course will cover the entire syllabus of the course. The assessment will be mark based.

If the course coordinator desires that there should be an open book examination in a course in any SEE, S/he may make a suitable recommendation to the Department/Programme Head. Final approval of the Dean will be necessary before the scheme is implemented. This method of examination must be announced to the students through the Course Outline before the commencement of the respective course.

9.4 Supplementary Examination (SPE):

(RR registration, grade F in SEE)

The Institute may decide to hold a Supplementary Examination (SPE) for SEEs at the end of each semester for students who have failed in SEE or who wish to improve the performance of SEE, such students will have to seek RR registration to take up SPE.

9.5 Schedules of SEE and SPE:

SEEs of all courses of the programme, as per the teaching scheme, will be held at the end of each Semester. The date of the Supplementary Examinations (SPE) will be held generally after 15 days from the date of result declaration of SEE and will be for only those courses that are offered in that semester.

9.6 Absence in SE examination with or without approval will be assigned Zero [0] marks and appropriate grade will be given to the student. However, s/he will be permitted to appear in the Supplementary Examination.

R.ENG(UG) 10: ASSESSMENT AND ROLES OF EXAMINERS

10.1 CE & PW:

The Course Coordinator in consultation with the faculty teaching in a course proposes the CE & PW components and their inter se weightage to the respective Head of Departments. The Dean takes the final decision for the same in consultation with the Departmental Head and the same be notified to the students before commencement of the course. Normally the faculty teaching a course/ component shall be the examiner for assessing the CE & PW components of the course.

10.2 Semester End Examination:

Normally the examiners for assessment of SEE shall be appointed as per the guidelines and examinations rules of Nirma University. There will be a minimum of two examiners in a course and both the examiners are individually responsible for assessment work allotted to them. The assessment shall be carried out after the meeting of examiners to discuss and finalize the Marking Scheme and the methods of evaluation, which will be duly minuted for further reference.

10.3 Maintenance of the assessed material of the SEE:

The examination section of the University shall maintain the assessed material of the semester/trimester end examination for one year.

10.4 Timeliness of Result Announcement:

It is essential to maintain the timeliness of all components of assessments, both formative and summative. In any case, the faculty should not take more than 07 days to declare any result of the formative assessment and normally not more than 07 days to submit the assessment of the Semester End Examination to the university examination section.

10.5 Declaration of final results:

The university shall announce the course grades of every semester/trimester within 10 days from the date of completion of the Semester End Examination. In case of failure to do so, the reasons for non-completion of results will be informed to the Director General.

10.6 Review of the question papers of SEE:

The Internal Quality Assurance Cell (IQAC) shall ensure that the review of the question papers should be completed within 30 days of the completion of the Semester End Examination.

The Head of the Institute shall form a departmental or Institute level committee consisting of three senior faculty members to review the quality of the question papers for the semester end examination. The report of the same shall be submitted to the Head of the Institute within 30 days of the completion of the said examination.

The Policy on Assurance of Learning [notified by Nirma University from time to time] shall be referred and accordingly, parameters of review of the quality of the question papers of SEE shall be carried out. The summary report of this review shall be placed before the Board of Studies of the concerned department for discussion and further improvements.

10.7 Audit of Course Assessments:

To enhance the quality of assessment, an audit of the assessment of a course of any one of the divisions in a semester shall be conducted in each programme covered under the policy. The course will be selected by the concerned Dean in consultation with the department head. The Institute shall develop a suitable mechanism to audit the same and report to the Director General through University IQAC.

R.ENG(UG) 11: GRADE AND PERFORMANCE LEVELS

The overall Academic Performance level of a student in any course will be adjudged in Semesters of the letter grades, and grade points. Table-1 provides significance of letter grades along with its equivalent grade points.

11.1 Absolute Grading:

The University follows the absolute grading system where the overall percentage of marks of a course shall be assigned an appropriate later grade as per the Grading system.

11.2 Course Grade:

Course grade will be given only when the student meets with the academic standards of passing of all components of a course.

Marks of SEE, CEE and PWE (as applicable) examinations shall first be aggregated on the basis of the component / inter se weights given in the Teaching Scheme. The overall percentage of marks, if fractional, will be rounded off to the next higher integer. After the aggregate marks of a student is calculated, the performance of each student in the course as a whole will be assigned a grade using the below conversion table.

Table No. 1 Conversion of Marks into Course Grades

| Overall Percentage (%) of Marks obtained | Letter Grade | Qualitative Meaning | Grade Point |
|--|--------------|---------------------|-------------|
| 91 and above | O | Outstanding | 10 |
| 81 to 90 | A+ | Excellent | 9 |
| 71 to 80 | A | Very good | 8 |
| 61 to 70 | B+ | Good | 7 |
| 51 to 60 | B | Above average | 6 |
| 46 to 50 | C | Average | 5 |
| 40 to 45 | P | Pass | 4 |
| Below 40 | F | Fail | 0 |
| Absent | Ab | Absent | 0 |

The Grade Report/Transcript will show only the Course Grade and not the marks.

R.ENG(UG) 12: PERFORMANCE LEVELS

The performance level of a student in credit courses at different stages of the study in a programme is assessed by the following measures.

12.1 Course Grade Point:

The numerical value (Grade Point) corresponding to the letter grade obtained in a course by a student.

12.2 Semester Grade Point Average (SGPA):

The Grade point Average (GPA) is computed from course grades as a measure of student performance in the courses. SGPA is based on the grades of all courses scheduled under a semester and it is the ratio of the sum of the product of the number of credits with the corresponding grade points scored by a student in each course and the sum of the credits of all the courses undergone by a student.

$$\text{SGPA (Si)} = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

where C_i is the number of credits of the i th course and G_i is the grade point scored by the student in the i th course of the semester.

12.3 Cumulative Grade Point Average (CGPA) & Programme Grade Point Average (PGPA):

The SGPA is based on the grades in all courses taken in a semester, while the CGPA is based on the grades in all courses taken after joining the programme of study at any point of study of a programme. The CGPA computed on completion of a programme based on the grades of all the credit courses of the programme is Semester as Programme Grade Point Average (PGPA).

$$\text{CGPA} = \frac{\sum(C_i \times G_i)}{\sum C_i}$$

where C_i is the number of credits of the i th course, G_i is the grade point of the i th course at any point of study of the programme.

The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

12.4 Equivalent Percentage (%) Marks for CGPA:

In case an equivalence between GPA values and percentage of marks is desired, the same can be obtained as given below:

$$\text{Equivalence \% of marks} = \text{CGPA value} \times 10.$$

R.ENG(UG) 13: PASSING STANDARDS

13.1 Component-Wise Minimum Passing:

A student is required to meet component-wise minimum marks for passing a course. The requirement of minimum marks in CE, PW and SEE is 40% each. A student is permitted to appear for the Semester End Examination only after S/he meets the requirement of passing in the CE & PW components.

13.2 The standard for passing a course:

The minimum standard for passing a course as whole is "Grade P".

3.3 Academic Standard for Successful Completion of a Semester:

For successful completion of a semester a student is required to earn a minimum SGPA of 5.00 besides he/she is required to pass all courses of semester.

R.ENG(UG) 14: FAILURE

14.1 Failure of components of course:

A student not meeting the minimum academic standard for passing any of the course components shall be awarded course Grade 'F'.

14.2 Scope for improvement:

Student fails in any component of a course is permitted to register (RR) for improvement during end of the following semester in addition to the opportunity to improve the SEE component by taking supplementary examination at the end of the same semester.

Similarly, the students not meeting with SGPA mentioned in R.13.3 are also permitted to register (RR) for improvement of passed courses with a Course Grade of 'C' or below.

Marks obtained in the improvement examination under RR category shall be considered for computation of final course grade even if the mark obtained is less than the previous examination.

As per the availability of the course, examinations will be conducted specifically for the student who wishes to improve the result or along with other students appearing in examination under Initial Registration (IR).

R.ENG(UG) 15: ACADEMIC BREAK:

A student will be allowed to take the break up to one academic year during the programme due to medical reason or any other justifiable reason subject to approval of the Director General on the recommendation of the Dean. The decision of Director General for consideration or rejection of such request shall be final. If the student considered for Academic break then following conditions shall apply:

- a) The student shall not be entitled for award of Medal,
- b) The student has to complete the study within the admissible duration to complete the programme,
- c) Payment of all applicable fees.

R.ENG(UG) 16: ACADEMIC PROGRESSION RULE

In order to successfully complete a semester a student is required to meet the academic standard as per Regulation R.ENG(UG) 13.3. However, a student be allowed to promote to the next higher semester even if he/she has not met with the all requirements subjects to certain conditions.

16.1 Failure in Course:

A student will be allowed to register for the courses of the next higher semester even if he/she has not meet with the minimum academic standard to pass all the courses of the semester subject to the condition that he/she has backlog in not more than 3 credit courses.

If a student fails to meet with the above condition will not be permitted to register for respective higher semester. Such students will repeat sufficient number of courses as ex-student and meet with the requirement of the promotion criteria.

16.2 Failure to meet the Academic requirement of the Semester:

Similarly, a student will be allowed to register for the higher semester even if S/he fails to meet with the minimum academic requirement for successful completion of a semester subject to the condition that the requirement of the 1st semester, 2nd semester, 3rd semester and 4th semester should be met by the end of 3rd semester, 4th semester, 5th semester and 6th semester respectively. If a student fails to meet with the above condition will not be permitted to register for respective higher semester. Such students will repeat sufficient number of courses as ex-student and meet with the requirement of the promotion criteria. Such students can also appeal to the Appeal Committee for grant of opportunity to be promoted to the next higher semester, provided that the student gives a viable assurance to make-up the short fall within a semester. The decision of the Appeal Committee will be final in this regard.

R.ENG(UG) 17: AWARD OF DEGREE

To qualify for the award of Bachelor of Technology degree a student requires:

- a) PGPA 5.0
- b) successfully complete the prescribed credits of the programme as specified in the Teaching and Examination Scheme
- c) successfully complete Value-added courses(s) as notified by the Dean in the Teaching and Examination Scheme with a minimum grade 'satisfactory, failing to which, s/he is required to

improve the Value-added courses(s) grade in the scheme as prescribed by the Dean, Faculty of Technology & Engineering

R.ENG(UG) 18: CANCELLATION OF ADMISSION

The admission of following categories of students is liable to be cancelled:

- a) Failure to meet the academic requirements for the award of under graduate degree within (4+2) years from the date of admission to the programme.
- b) The student, whose admission is so cancelled, can appeal to the Appeal Committee. The Committee may grant an extension up to the ONE additional Semester/s for the deserving cases, provided the student gives a viable assurance to make up the shortfall within that period.

Note:

Notwithstanding anything contained above, if a student has cleared all the courses and have earned the requisite number of credits except one course, may appeal to the President. The President may consider such appeal on the recommendation of the appeal committee prescribed under the regulations for the purpose and after considering the genuineness of the case may give ONE more additional attempt to the student concerned to clear the remaining course.

R.ENG(UG) 19: PRE-REQUISITE COURSES AS CREDIT COURSES

- 19.1 The students who are admitted in the higher semesters as per provisions of Annexure-II under Regulation R.ENG.(UG)-2 shall be required to complete the pre-requisite courses as defined under the said regulation.
- 19.2 The syllabi and teaching and examination schemes for pre-requisite courses will be approved by the Director General on the recommendation of the Dean concerned.

The Regulations for examinations, assessment, grading and passing etc., will be the same as those for credit courses.
- 19.3 The student shall have to pass a pre-requisite course in a maximum of four consecutively available attempts. Failure to satisfy this criterion at any stage will disqualify the student from registering in any higher semester.
- 19.4 On passing all scheduled pre-requisite courses, the student will be deemed to have earned all credits allotted to the first/ first two semesters, as the case may be. The credits earned for pre-requisite courses will not be counted for calculating any performance index.

Nirma University
Institute of Technology
Annexure – I
R.ENG. (UG) 1: THE PROGRAMME/S

LIST OF PROGRAMMES

1. B Tech. in Civil Engineering
2. B Tech. in Chemical Engineering
3. B Tech. in Mechanical Engineering
4. B Tech. in Electrical Engineering
5. B Tech. in Electronic & Instrumentation Engineering
6. B Tech. in Electronics & Communication Engineering
7. B Tech. in Computer Science and Engineering
8. BTech in Artificial Intelligence & Machine Learning

Annexure – II

R.ENG. (UG) .2:

ii. ELIGIBILITY CRITERIA AND DETERMINATION OF MERIT FOR ADMISSION

- (A) The students seeking admission in the 1st year of Degree Programmes leading to Bachelor of Technology (B Tech.) shall have passed the Qualifying Examination with minimum eligibility criteria of percentage of marks in the subjects as prescribed by the Govt. of Gujarat from time to time.
- (B.1) The students seeking admission in the 2nd year (3rd semester) of Degree programmes leading to Bachelor of Technology (B Tech.) shall have passed the qualifying examination with minimum aggregate marks as prescribed by the Govt. of Gujarat from time to time
- (B.2) Such students will be required to pass following pre-requisite courses, to be offered during 2nd year of B Tech. Programmes:
- a) Foundation Mathematics – I
 - b) Foundation Mathematics – II
 - c) Computer Programming

DETERMINATION OF MERITS FOR THE ADMISSION:

The method of determining the merit for the admission will be decided by the Director General, Nirma University from time to time depending upon the requirement.

DISCLAIMER

This regulations are the content of the original notifications issued in pursuance to the Board of Governors meetings and hence, in any dispute or doubt under this document will be verified with the original notification and the same would be final.

6. Forms & Undertakings / Declaration (For reference purpose only)



FORM OF MEDICAL FITNESS CERTIFICATE

(To be produced at the time of reporting at the institute)

I / Dr. _____ (Name & Designation) posted in _____ (Name of Hospital & Place) certify that I have carefully examined _____ (Name of Candidate) S/o. D/o. Shri _____ and according to his/her medical examination, I have diagnosed nothing that may prevent him/her pursuing under graduate/post graduate degree courses.

He/She has no disease or mental or bodily infirmity making him/her unfit or likely to make him/her unfit in the near future for visits / training / internships / projects etc. at industries, and active out door duty, as a student.

Mark of identification: _____

Signature of Medical Officer

Seal of Designation and Hospital

Dated:

Photograph of candidate duly attested by the Medical Officer



UNDERTAKING FOR CONDUCT AND DISCIPLINE RULES FOR THE STUDENTS

I,.....IT,NU Merit No. / Roll No.
admitted in (programme) of the Institute of Technology, Nirma University do hereby declare and undertake that I shall comply with followings:

1. I always carry the identity card while I remain in the campus and produce if required by the competent authorities.
2. I attend all the scheduled classes from the beginning to the end of the term/semester. I am aware that absence due to illness or any unavoidable circumstances shall be considered only if the application is supported by medical certificates and/or if the leave application is submitted to the Director through the parents.
3. I shall be polite individually or in groups and show respect to the faculty (teachers) as well as to the staff of the Institute. I shall follow the Instructions in connection with academic or other matters as instructed by the teachers from time to time. I shall not participate in activities that may cause harm to the academic environment or teacher-student relation.
4. I am aware that the action of any individual, group or wing which amounts to interference in the regular administration of the Institute/University is prohibited.
5. I am aware that Causing disfiguration or damage to the property of the Institute/University or belongings of staff members or students is forbidden.
6. I am aware that No student shall indulge in any activity in the college campus that might be illegal or may lead to disorderliness.
7. I am aware that I should not be in possession of any intoxicant or intoxicating materials and should not consume such things.
8. I am aware that use of any kind of mobile phones; whether ordinary, camera phone or smart phone in the academic areas during academic activities, is prohibited. However, for academic purpose or in exceptional cases, the students can be allowed to use mobile with prior permission. Unauthorized use of mobile phone in the academic area specifically in the classrooms is prohibited failing to which the fine of Rs. 5000/- can be imposed.

During the examinations; specified rules for the same shall be followed.

9. I shall abide by the Code of Conduct, Procedure to inquire and decide with misconduct/indiscipline by students Rules 2020 and other related provisions like dress code on the campus, rules for maintaining vehicles on the campus, and public display of affection (PDA) and etiquette on the campus etc.

Signature of Student _____

Date : _____

Declaration

I,.....,solemnly affirm, declare and undertake that I shall abide by all the rules and regulations and if I found violating any rules then, I shall be subjected to the necessary action/penalties as per provision of rules/regulations. In case of any legal issue arises, the jurisdiction shall be Ahmedabad, Gujarat only.

Sign

Date:

Place: Ahmadabad



UNDERTAKING FOR ACADEMIC RULES AND REGULATIONS

Registration No./Merit No. _____

I, Mr./Ms. _____ son/daughter of
 _____ have secured admission at the
 Institute of Technology, Nirma University in the year 2024-25 for the BTECH / BTECH (CSE)-MBA / BS (CSE) [2+2
 Dual Degree] 2023 Programme. I hereby confirm that I have gone through the academic rules and regulations of
 the programme/Institute very carefully and I assure you that I will abide by the same.

 Name & signature of student

 Endorsement by parent/guardian



UNDERTAKING FOR NOT INVOLVING HIMSELF/ HERSELF FOR RAGGING

I, _____ admitted in the Semester I (One) of the BTECH / BTECH (CSE)-MBA / BS (CSE) [2+2 Dual Degree] 2024 Programme at the Institute of Technology, Nirma University, do hereby declare and undertake that I am fully aware of the rules and regulations regarding ragging and aware of the University's policy towards zero tolerance on ragging which are in line with the Directives of the Hon'ble Supreme Court of India. I am also aware about the punishment, if I found guilty of ragging or violating the rules.

Date:

Place:

Signature of the student

Name of the student: _____

Signature of the Parent/ Local Guardian _____

Name of the Parent/ Local Guardian: _____



Declaration to be submitted by the Students Admitted to Different Programmes of the University (Code of Conduct)

DECLARATION

I, _____ admitted in _____ (programme) of the Institute of _____, Nirma University do hereby declare and undertake that I will abide by the Code of Conduct, Procedure to inquire and decide with misconduct/indiscipline by students Rules 2020 and other related provisions like dress code on the campus, rules for maintaining vehicles on the campus, and public display of affection (PDA) and etiquette on the campus etc.

I will abide by all the rules and regulations and if I am found violating any rules then, I shall be subjected to the major/minor penalties as per the provision of aforesaid rules.

In case any legal issue arises, the jurisdiction shall be Ahmedabad, Gujarat only.

Date:

Place:

Signature of the student

Name of the student: _____

Signature of the Parent/ Local Guardian _____

Name of the Parent/ Local Guardian: _____



Undertaking for Rules & Regulations of the Examination

I, _____ Roll No. _____
 studying in First year of _____ programme at Institute of _____,
 Nirma University, Ahmedabad do hereby undertake that I have read and understood all the Rules & Regulations
 related to Academic Dishonesty at examinations/tests/assignments and punishment in case of using unfair means, I
 have also gone through the Academic Regulations related to Granting of Term and Cancellation of admission, and I
 shall observe, follow and abide by all these rules and regulations.

I shall abide by all the rules and regulations and if I am found violating any rules then, I shall be subjected to the
 necessary action/penalties as per provision of rules/regulations.

In case any legal issue arises, the jurisdiction shall be Ahmedabad, Gujarat only.

Signature _____

Name _____

Address _____

Signature of Parents _____



UNDERTAKING

(To refrain from consumption of Drugs and Alcohol)

I, _____ bearing Roll No. _____ admitted in _____ (programme) of Institute of _____, Nirma University, do hereby declare and undertake that I will refrain myself from consumption of Drugs and Alcohol.

I have read the relevant instruction with regard to ban on consumption of drugs and alcohol. I am aware that the use/possession of narcotics drugs and alcohol is a punishable offence under the law of the Government of Gujarat and if I am found guilty of using such thing/s, then it will amount to a criminal offence and I am liable for the appropriate penalty as per laws.

I hereby give an undertaking to the Institute that I will refrain myself from consumption of Drugs and Alcohol.

Date _____

Place _____

Signature of Student

I undertake that I will take utmost care to see that my ward does not get involved in any such incident.

Name of Parent/Guardian _____

Signature of Parent/Guardian _____

Address of Parent/Guardian with contact nos. _____

DRESS CODE, AND PUBLIC DISPLAY OF AFFECTION & ETIQUETTE ON THE UNIVERSITY CAMPUS

Dress Code on the Campus

The students may wear formal and casual dresses, like:

Formal dresses including pants and long below-knee length skirts, dresses, sarees, etc. Business professional including formal pants, shirts, khakis, chinos, salwar suits, etc. Semi-business casuals including dark jeans and shirt. Leather, formal, and Semi-formal shoes and sandals.

The students must avoid wearing informal and inclement dresses, like:

- Shorts, Bermudas. any knee-exposing bottoms
- Shoulder baring tops, Midriff-baring tops
- Skinny and skimpy dresses, Transparent and inappropriate dresses
- Bank Tops, Ripped Jeans, Slippers

The inappropriate dressing on the Campus will be considered as an act of indiscipline and appropriate disciplinary action will be taken against such students.

Public Display of Affection and Etiquette on the Campus

Public display of Affection (PDA) is inappropriate behaviour on the campus. It can affect others in several ways, including some of the following:

- It can make others feel uncomfortable and embarrassed, which can lead to a negative and hostile environment.
- Such actions can distract others from their academic pursuits and affect their ability to focus on their studies.
- It can invade others' personal space and make them feel violated of their basic rights.
- Engaging in PDAs is seen as disrespectful to others and can harm community relations.

The University encourages all students to be respectful of others and to maintain a professional and educational atmosphere on the campus. PDA will be considered as a misconduct and appropriate disciplinary action will be taken against any student indulging in it.

The University has strict policies in place to ensure the safety and well-being of all students, and any violation of these policies will result in disciplinary action.

NIRMA UNIVERSITY - INFORMATION TECHNOLOGY POLICY

Preamble:

The Nirma University Information Technology (IT) Policy sets forth the central policies that govern the responsible usage of all users of the University's information technology resources. This comprises the IT facilities allocated centrally or by individual departments. Every member of the University is expected to be familiar with and adhere to this policy. Users of the campus network and computer resources ("users") are responsible to properly use and protect information resources and to respect the rights of others.

Applicability:

The IT Policy applies to all University faculty, staff and students and all others using the IT resources, whether personally or of University owned, which access, transmit or store various types of related information.

1. Objectives

Each user of the University Information Resources must ensure that it is used for promoting the mission of the University towards teaching, learning, research, and administration. In particular, the major objectives of this document are:

- 1.1 To ensure the integrity, reliability, availability, and superior performance of the University IT Systems
- 1.2 To ensure that the IT resources protects the official e-identity (allocated by the University) of an individual
- 1.3 To ensure that all the users of the University are responsible for adhering to the procedures governing the implementation of this Policy document and any other matter incidental to those rules

2. Areas:

2.1 IT usage and Prohibitions

2.1.1 The users of the University shall make effective usage of campus collaboration systems, internet, wireless resources, official websites (including university website, conference website, journal portals, online admission systems, and course website), and Management Information Systems (MIS) and ERP solutions, Learning Management System, Remote Login based facilities of the University and e-Library resources.

2.1.1 The University shall stress upon the users to comply with University policies and legal obligations (including licenses and contracts).

- 2.1.2 The University shall strive to arrange for awareness programmes to acquaint the users with the effective usage of IT resources.
- 2.1.3 Prohibited Use - The users shall not send, view or download fraudulent, harassing, obscene, threatening, or other messages or material that are a violation of applicable law or University policy. In particular, contributing to the creation of a hostile academic or work environment is prohibited.
- 2.1.4 Copyrights and Licenses - Users must not violate copyright law and must respect licenses to copyrighted materials. For the avoidance of doubt, unlawful file-sharing using the University's information resources is a violation of this policy.
- 2.1.5 Social Media - Users must abide by the rules of the University towards the usage of social networking sites, mailing lists, news rooms, chat rooms and blogs.
- 2.1.6 Commercial Use - The University IT resources shall not be used for any commercial and promotional purposes, through advertisements, solicitations or any other message passing medium, except as permitted under University rules.

2.2 Security and Integrity

- 2.2.1 Personal Use - The University IT resources should not be used for activities violating the basic functionality and mission of the University, except in a purely incidental manner.
- 2.2.2 The users must refrain from making any unauthorised access of information in order to promote secure access of Network and Computers.
- 2.2.3 The competent system administrator may access the information resources for a legitimate purpose.
- 2.2.4 Firewall - Additional procedures to maintain a secured flow of internet and intranet based traffic in the campus shall be managed through the use of Unified Threat management (firewall).
- 2.2.5 Anti-virus and security updates - The regular updation of the anti-virus policy and security updates should be done for the protection of computing resources.

2.3 IT Asset Management

- 2.3.1 Asset Management: The University shall lay down business processes for the management of hardware and software assets that facilitates the usage of IT resources in the University. This shall include procedures for managing the purchase, deployment, maintenance, utilization, energy audit, and disposal of software and hardware applications within the University.
- 2.3.2 Copying and Distribution: The University shall ensure that there is no violation in the copying and distribution of proprietary and licensed softwares.

2.3.3 Risks: The University shall emphasize on managing the risks involved for the usage of IT resources. This shall include standard procedures for identification, minimization and monitoring of risk impact by preventive and corrective measures. This should also include procedures for timely data backup, replication and restoring policies, power backups, audit policies, alternate internet connectivity for a fail-safe internet access.

2.3.4 Open Source Asset: The University shall endeavour towards the promotion and effective usage of open source softwares.

3. Operating Aspects:

3.1 University Governance - The University shall endeavour to ensure fair implementation of this policy so as to meet with the objectives of its formation. The responsibility of the management of operational aspects of IT resources is as per the hierarchical flow of the University governance structure.

3.2 The respective Heads of the Institutions shall be responsible for compliance with all University policies relating to the use/ownership of information resources, keeping in mind the Vision and Mission of the University.

3.3 Chief Technical Officer working at University Level shall coordinate various activities related to the adherence of the IT Policy in association with the IT Administrator of the respective Institute.

3.4 Individual Users - The users are solely responsible for the activities they perform on Institute/University servers with their "UserName/Password" pairs and IP (Internet Protocol) addresses assigned to them.

4. Violation of Policy:

Any violation of the basic objectives and areas mentioned under the IT Policy of the University shall be considered as a violation and as a misconduct and gross misconduct under University Rules.

5. Implementation of Policy:

For implementation of this policy, the University will decide necessary rules from time to time.

6. Review and Monitoring:

The Policy document needs to be reviewed at least once in two years and updated if required, so as to meet the pace of the advancements in the IT related development in the industry.

Review of this policy document shall be done by a committee chaired by Director General of the University. The other members of the committee shall comprise of the Chief Operating Officer, Director (Academic and General Administration), Head of Institutions, Executive Registrar and other members as nominated by the Chair.

Acknowledgement:

Nirma University wishes to acknowledge the following institutions whose related policies and procedure provided background and foundation in the preparation of this policy document:

Stanford University, Princeton University, Yale University, University of Michigan, Northern Caribbean University, Thapar University.

NIRMA UNIVERSITY- WI-FI POLICY

Wireless Network Resources:- Rules and Regulations for wireless Access of NU

The use of wireless network resources (wireless network connection etc.), which are allocated to students, faculty and staff members of Nirma University, are subject to the rules and conditions set forth within "NU Computing and Networking Access Rules" which are as below.

1. While using Institute/Nirma University (NU) IT Resources, the users should respect the copyright and intellectual property rights for all the resources created using Institute/Nirma University resources such as software, hardware, network resources. Users can use such resources by carefully observing such rules and procedures as obtaining permission/approval, adhering to licensing terms, complying with networking ethics etc...

2. Authorization and responsibilities

- The CSE Department of IT-NU makes available IT Resources to the users and maintains the operation and connectivity of the services in campus. CSE department will assign user name and password to the users for wireless access. For wireless access user must contact administrator, wireless network at A-104 computer centre with his/her laptop with duly filled registration form to complete registration process.
- The users of Institute/University are themselves solely responsible from the activities they perform on Institute/University servers with the "User name/Password" pairs and IP (Internet Protocol) addresses those are assigned to them.
- The Institute/University administration reserves all the rights to take appropriate action in the issues causing disputes amongst Institute/University Users/Special Users and the third parties.
- The Director IT-NU or committee appointed by Director, IT-NU is authorized and entitled to specify the all encompassing rules, regulations and policies about usage of IT Resources, review and revise them regularly according to the demands of the emerging new technologies, implement and enforce the amendments as and when required. The changes committed shall be announced publicly via web site on URL:

https://nirmawebsite.s3.ap-south-1.amazonaws.com/wp-content/uploads/sites/20/2019/03/wifirr_12112014_122414PM.pdf

3. General guide line for wireless users:

- This wireless access facility will be available during working hours of the Institute/ University.
- Use of the wireless/computing facilities/services must comply with the law of Institute/University, Government and all other concern regulatory authorities.
- Use of the Institute/University computing facilities/services must not interfere with any other user's usage. Detection of any such incident will lead to disciplinary action.

- User is not entitled to use computing facilities/services those he/she has not been authorised to use.
 - User must not access any program or data which he/she has not been specifically authorised for the use.
 - User must not use or copy any data or program belonging to other users without their explicit and specific permission.
 - User must not use Institute/University computing facilities/services to harass, defame, libel, slander, intimidate, impersonate or otherwise abuse another person. In such cases legal action will be taken against user(s).
 - User must not use Institute/University computing facilities/services for the creation, collection, storage, downloading or displaying of any offensive, obscene, indecent or menacing images, data or material capable of being resolved into such. (There may be certain legitimate exceptions for academic purposes which would require the fullest disclosure and special authorisations)
 - Users must not use the Institute/University computing facilities/services to conduct any form of commercial activity without explicit permission. Use of "computing services" for commercial work may be governed by software licence constraints and users should verify that the intended use is permissible under the terms of those licences with their local IT Support Staff.
 - Users must not use the Institute/University computing facilities/services to disseminate mass (unsolicited) mailings.
 - Users must not install, use or distribute software on his/her laptop for which he/she has not had a licence or permission.
 - In general, use of Institute/University "computing services" is available to users for study, research, academic work and administrative purpose of the Institute.
4. The personal use of the wireless network facilities by the users should in no way disrupt access priorities of those users that use the network for such **instructional, academic, research and administrative objectives**. In this respect, users must comply following points:
- a. Peer-to-peer (P2P) file sharing programs, as well as violating copyright and licensing rules, use up an excessive amount of bandwidth that consequently hinders the use of network resources for purposes of priority. For this reason, it is strictly forbidden to use the "**peer-to-peer**" file sharing programs - even if they are used inside the campus network. Such usage includes, **but is not limited to**, the following programs:

KaZaA, iMesh, eDonkey2000, Gnutella, Napster, Aimster, Madster, FastTrack, Audiogalaxy, MFTP, eMule, Overnet, NeoModus, Direct Connect, Acquisition, BearShare, Gnucleus, GTK-Gnutella, LimeWire, Mactella, Morpheus, Phex, Qtella, Shareaza, XoLoX, OpenNap, WinMX, DC++, BitTorrent etc..

- b. It is forbidden to use wireless network resources for **mass mailing, mail bombing, sending spam** and users are not allowed to provide the means to the third parties to perform similar acts.
 - c. It is prohibited to keep possession of server computers that **provide internet service** (web hosting service, e-mail service etc.) via wireless network.
 - d. Wireless network facilities of the Institute/University (network connection, user name, local/off-campus access etc.), which are granted as a privilege to the Institute faculty member, staff member or as a student, will be used by every user in an appropriate, legal, ethical and considerate manner in accordance with the codes of behaviour and the regulations. It is the sole responsibility of all users that they are not endangering the safety of the resources by providing intentionally or unintentionally the means to **the third parties to access to network resources in other words, users must not pave the way for others to exploit privileges and act as if they are authorized to own the legitimate rights of the Institute/University users.** (proxy, relay, IP sharer, NAT etc., username/password). The user alone is answerable and accountable for every unlawful and unwanted consequence that may result from this act.
 - e. It is forbidden to commit activities that threaten the security of the network (DoS attack, port-network scan etc.)
 - f. Users are definitely not allowed to change the any settings which are provided by administrator of wireless network interface. These settings are to be handled and verified to the authentication system of the IT-NU. If due to hardware failure (as in the cases of breakdown or failure of wireless network access card etc.) users must certainly report it to administrator of wireless network at A-104 computer centre to carry out the proper procedure for desired change. (The new computer/wireless network card will not gain access to the wireless network, unless it is not authenticated by the authentication system).
5. If the use of the computing and networking facilities is proven to be incompatible with the educational and scholarly missions of the Institute/University and law of Government, and if the user has been proven to behave irresponsibly, inappropriately and illegally in a manner displaying disruptive and inappropriate conduct that endanger the efficiency, integrity, safety and continuity of networking services; and if the user breaches the rules and regulations set forth in this document, one or more of the following disciplinary actions may be taken as a reasonable response to eliminate threatening and abusive behaviour;
- The user may be warned verbally or with a written notification.
 - Local and/or off-campus network access privileges may be restricted, for a specified term or indefinitely.
 - Local and/or off-campus network access privileges may be suspended, modified or withheld for a specified term or indefinitely.

- The user codes and user accounts on the central server systems may be terminated for a specified term or indefinitely.
 - Disciplinary mechanism of Institute/University such as investigation or prosecution may be initiated by the academic or administrative disciplinary proceedings/committee.
 - judicial proceedings may be started,
 - Any suitable disciplinary action as decided by the authority, depending on:
 - the severity misconduct
 - the magnitude of the resulting damage (on the resources and persons/organizations),
 - recurrence of the misconduct
6. The wireless user, who has been proven to have disregarded or violated the rules and regulations, will be forewarned by the discipline committee. If one or more of the provisions of this policy are violated and IT Resources are inappropriately used, this may result in one or more disciplinary action(s) as stated above.

These rules and regulations become effective as soon as they are publicized. The Institute reserves **the right to amend these Rules and Regulations** at any time without prior notice.

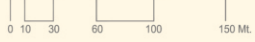


LEGEND:

- 1 - SECURITY MAIN GATE - 80 mt. FROM HERE
- 2 - PARKING SPACE - 180 mt.
- 2-A - PARKING SPACE - 495 mt.
- 3 - TRANSPORT OFFICE - [T] - 175 mt.
- 4 - CAR GARAGE - 225 mt.
- 5 - PETROL PUMP - 380 mt.
- 6 - POLICE STATION - 190 mt.
- 7 - SECURITY GATE 1 - 150 mt.
- 8 - SEWAGE TREATMENT PLANT - 110 mt.
- 9 - BLOCK-A MECHANICAL & CHEMICAL ENGG. DEPARTMENT - [A] - 140 mt.
- 10 - POST GRADUATE AND RESEARCH CENTER [PGI] INSTITUTE OF TECH. DIRECTOR OFFICE - 215 mt.
- 11 - BLOCK-C INSTITUTE OF ARCHITECTURE AUDITORIUM [C] - 330 mt.
- 12 - SPORT GROUND, HOCKEY & FOOTBALL - 130 mt.
- 13 - CONVOCATION STAGE - 130 mt.
- 14 - OPEN AIR THEATRE - 110 mt.
- 15 - WORK SHOP - [W] - 155 mt.
- 16 - HEALTH CENTER, DIESEL GENERATOR ROOM & ELEC. SUB STATION - 390 mt.
- 17 - BLOCK-E CIVIL ENGG. DEPT., IT & COMP., M.C.A. DEPARTMENT, LIBRARY (INST. OF TECH.) [E] - 175 mt.
- 18 - CANTEN BUILDING, III CELL, STUDENT STORE, STUDENT SECTION, ATM & BANK - [K] - 270 mt.

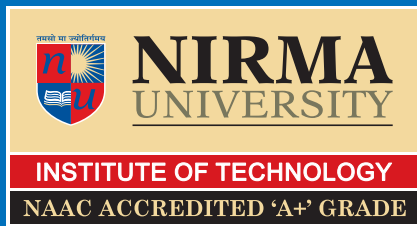
- 19 - BLOCK-D ELECTRICAL ENGG., EC & IC DEPT. [D] - 360 mt.
- 20 - SECURITY GATE 2 - 315 mt.
- 21 - WATER FALL STRUCTURE - 205 mt.
- 22 - UNIVERSITY BUILDING, AUDITORIUM, CENTRAL LIBRARY & CLASS ROOMS (WORK IN PROGRESS) - 355 mt.
- 23 - INSTITUTE OF LAW [L] - 505 mt.
- 24 - FOOD COURT 2 - [F2] - 595 mt.
- 25 - BOY'S HOSTEL - [B] - 630 mt.
- 26 - GIRL'S HOSTEL - [G] - 805 mt.
- 27 - STUDENT ACTIVITY CENTER (DINING HALL, CANTEN, GYMNASIUM, ROBOTIC LAB, YOGA HALL, INDOOR GAMES ROOM) - 685 mt.
- 28 - UNDER GROUND WATER TANK (5 LACS LITER) - 690 mt.
- 29 - OVER HEAD WATER TANK (2 LACS LITER) - 715 mt.
- 30 - BOY'S HOSTEL - [H] - 800 mt.
- 30 - A - GUEST HOUSE - [G] - 715 mt.
- 31 - SECURITY GATE 3 - 495 mt.

- 32 - INSTITUTE OF MANAGEMENT, AUDITORIUM [M] - 575 mt.
- 32-A - UNIVERSITY OFFICE - 575 mt.
- 33 - FOOD COURT 1 - [F1] - 755 mt.
- 33-A - MULTI PURPOSE ACTIVITY LAWN
- 34 - CRICKET GROUND - 700 mt.
- 35 - BADMINTON COURT - 700 mt.
- 36 - TENNIS COURT, BASKET BALL COURT, VOLLEY BALL COURT & CRICKET PITCH FOR PRACTICE - 700 mt.
- 37 - INSTITUTE OF PHARMACY [P] - 670 mt.
- 38 - ANIMAL HOUSE - [A] - 670 mt.
- 39 - ELECTRICAL SUBSTATION BUILDING & A.C. PLANT ROOM - 780 mt.
- 40 - INSTITUTE OF SCIENCE [S] - 825 mt.
- 41 - HERBAL GARDEN - 630 mt.
- 42 - PROPOSED GIRL'S HOSTEL (15 STOREY) - [H] - 530 mt.
- 43 - NIRMA VIDHYAVIHAR (SCHOOL BUILDING)



LAYOUT FOR NIRMA UNIVERSITY CAMPUS, AHMEDABAD.





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