



#### NATIONAL INSTITUTE OF TECHNOLOGY

TIRUCHIRAPPALLI

UNDERGRADUATE CAMPUS PLACEMENT BROCHURE 2022 - 23



ABOUT NITT

WHY RECRUIT AT NITT

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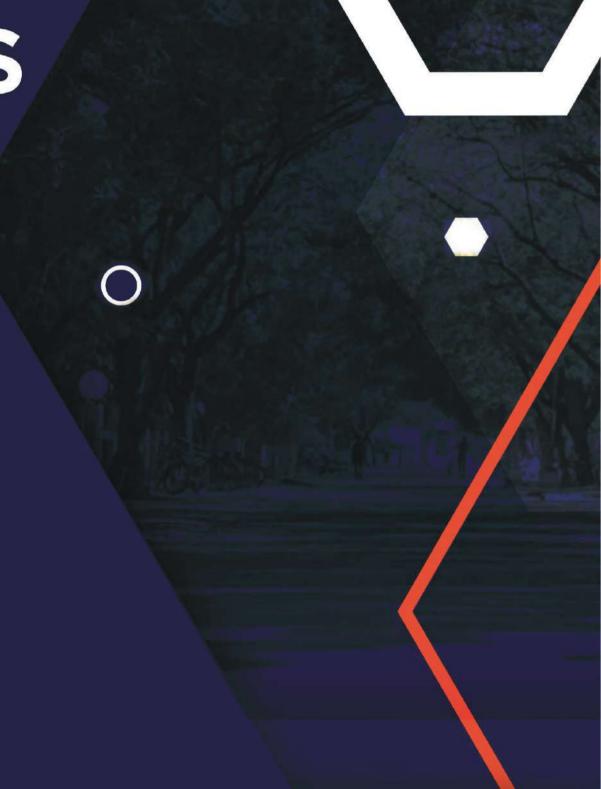
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### ABOUT **NITT**

- National Institute of Technology, Tiruchirappalli, formerly called Regional Engineering College, Tiruchirappalli, is a public technical and research university near the city of Tiruchirappalli in Tamil Nadu, India. Founded in 1964, it is one of India's oldest, most selective, and most prestigious technical universities.
- NIT Trichy is recognized as an Institute of National Importance by the Government of India under the National Institutes of Technology Act, 2007. The university focuses exclusively on science, technology, engineering, management and architecture.
- NIT Trichy teaches not just the science and technology of engineering, but more than that, it inculcates in each one of its students the virtue and skills needed to make a difference in tomorrow's world.
- NIT Tiruchirappalli, through its Vision, Mission and Core Values, defines herself as:
   An Indian institution with world standards
   A global pool of talented students, committed faculty and conscientious researchers
   Responsive to real-world problems and, through a synergy of education and research, engineer a better society.

#### VISION

To be a university globally trusted for technical excellence where learning and research integrate to sustain society and industry.

#### MISSION

- To offer undergraduate, postgraduate, doctoral and modular programmes in multi-disciplinary, inter-disciplinary and emerging areas.
- To create a converging learning environment to serve a dynamically evolving society.
- To promote innovation for sustainable solutions by forging global collaborations with academia and industry in cutting-edge research.
- To be an intellectual ecosystem where human capabilities can develop holistically.

#### **CORE VALUES**

- Integrity
- Excellence
- Unity
- Inclusivity

#### **AWARDS AND RANKINGS**

#### **Best Innovation Club**

Hon'ble President of India Sri Ram Nath Kovind Festival of Innovation and Entrepreneurship (FINE) 2018

#### FICCI University of the year

FICCI National Education Summit 2018

#### Ranked first among NITs, ninth among all

engineering institutes

National Institutional Ranking Framework(NIRF) 2020, Ministry of Education

#### **Excellence in Employability**

12th FICCI Higher Education Summit 2016

#### Among top 25 Publicly funded

#### Institutions in India

Atal Ranking of Institutions on Innovation Achievements (ARIIA) 2020.

#### Ranked 27 in India

QS Ranking 2021

#### Ranked 9th in India

Outlook Ranking 2021

#### Ranked 9th in India

India Today Ranking 2021

#### Ranked 9th in India

The Week Ranking 2021

#### **NEWS HIGHLIGHTS**

#### Facilities set up in the academic year 2019-20 and 2020-21

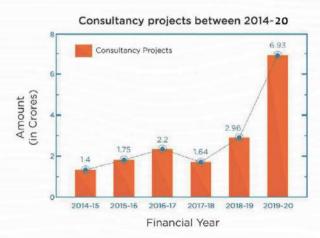
- Setting up of a wave flume facility worth \$94,000 at the Civil Engineering department. (2020-21).
- Centre of Excellence in Internet of Things, Artificial Intelligence and Intelligent Machines (2019-20).
- Centre of Dynamic Excellence in Manufacturing in partnership with Siemens Industry Software (2019).
- Centre of Excellence in Energy Harvesting and Storage Technology (2019).

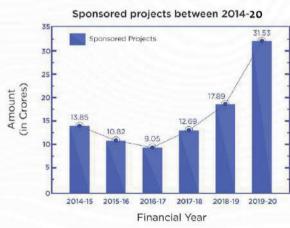
### Highlights about NIT-T in the academic year 2019-20

- The only NIT to be appointed as the National MOOCs Co-ordinator for Swayam central courses.
- Mrs. Ponni M Concessou and Mr. Oscar G Concessou, architecture alumni - from NIT Tiruchirappalli, have been featured in the Forbes Magazines' March-April 21 edition.
- Scientists of NITT have developed a technique to produce low-cost biodiesel from micro-algae, which could help in reducing the country's carbon footprints.
- Responding to COVID crisis, NITT also prepared hand sanitizers as per WHO guidelines along with low cost re-usable 3D Printed face-shield at its Centre of Manufacturing Technology.

#### RESEARCH AND CONSULTANCY

NIT-T strives its best to position itself at the forefront of cutting-edge research in pace with global standards. Research activities at NIT-T have been growing in all metrics with respect to the quantity and quality of researchers. There are several sponsored projects currently funded by MHRD, DST, SERB, CSIR, DRDO, ISRO, GTRE, AICTE, RGNIYD, DEITY, DAE. In addition to this, major consultancy projects with agencies like BHEL, CPW, PWD, Airport Authority of India, NLCIL,CDAC are also undertaken across different departments of the Institute. The scholarly output of the institute per year is on an average of 700 publications and 10000 citations. In addition to this, the research community of the institute actively engages in translating novel ideas to a product/process and has several published and granted patents to its credit.





11,498
Number of Research Publications

3,247 Number of Journals

41
Total Number of Patents

**1,28,809**Number of Citations

₹1.12 Billion

Total funding for R&C (approx)

311 Total number of Faculty

#### RESEARCH FACILITIES

#### SIEMENS CENTER OF EXCELLENCE

The Siemens CoE in Manufacturing, operates with a primary focus of creating a robust technical education eco-system through its experience in industrial products and services.

There are 12 sophisticated Laboratories for Design and Validation, Advanced Manufacturing, Test and Optimization, Automation, Electrical and Energy savings, Process Instrumentation, Mechatronics, CNC Machines, CNC Controller, Robotics, Rapid Prototyping and Internet of Things which provide opportunity for promising innovations. This multifaceted unique centre offers skill development courses, Internships, Research and Development assistance and Industrial consultancy services across various sectors.

- World Class Infrastructure
- Certification from NIT Trichy & Siemens
- Placement Assistance
- Bridging Academics & Industry
- Exposure to Cross Industry Applications

### CENTER FOR ENTREPRENEURSHIP DEVELOPMENT AND INCUBATION (CEDI)

CEDI is dedicated to help the student community and graduate start-ups and helps entrepreneurs turn ideas into viable businesses. CEDI is located in the Central Library building, NIT Campus which provides access to office space, business advice and other support services to new and budding start-ups, nurturing their development until they are ready to graduate onto an independent enterprise.

The Centre provides services designed to help entrepreneurs grow, including:

- R & D and Incubation Facilities
- Mentor Network
- Networking
- Access to NITT Intelligence

CEDI provides seed funds up to 25.00 Lakhs for technology-oriented innovative business ideas. All the necessary mentoring and support for mobilizing funds, creating access to markets, augmenting managerial skills etc. are provided by CEDI. CEDI NIT Trichy and Sonata Software have announced a partnership to promote student innovation and entrepreneurship.

#### TEQIP

#### Third phase of Technical Education Quality Improvement Programme

The Third phase of the Technical Education Quality Improvement Programme (TEQIP-III) is a key component for improving the quality of Engineering Education in existing institutions. The project is implemented through the Ministry of Human Resource Development (MHRD) of the Government of India as a Central Sector Scheme (CSS). One of the main objectives of TEQIP-III is twinning arrangements to build capacity and improve performance of institutions and ATUS participating in focus states. NIT Tiruchirappalli is the Mentor Institute for Dr. B. R. Ambedkar Institute of Technology, Pahargaon, Port Blair, Andaman & Nicobar Islands (Mentee Institute). NIT Tiruchirappalli was sanctioned an amount of Rs.7 Crores under TEQIP-III. Out of this, Rs: 2.01 Crores is utilised for purchasing equipment as part of modernization of laboratories in various departments.

#### **Activities under TEQIP-III**

- Seed money to the faculty members (student projects) - 139 faculty members claimed under Research & Development Head worth Rs. 26 Lakhs.
- Order placed for Equipment worth Rs. 54 lakhs in various department laboratories.
- Stanford University NPIU MHRD survey was conducted during December 2017 for two departments (EEE and CSE)
- 54 students have visited Canada under R&D head during May to July 2019 as part of the Student Mobility Programme by MITACS Canada & MHRD, NPIU New Delhi



#### Centre of Excellence in Artificial Intelligence (CoE-AI)

CoF-ALNIT-T established with ₹1.18 crore sanctioned from Higher Education Funding Agency (HEFA). The NIT-T had signed a Memorandum of Understanding with Nvidia Corporation in June. The Centre had been sanctioned sponsored projects from DRDO, ISRO and Naval Research Board amounting to a total of ₹1.5 crore. The CoE-AI NIT-T would also focus attention on solving societally relevant problems through providing guidance on crisis management, healthcare and decision support system in light of the current pandemic. The core team of CoE-Al intended to transform the facility in the long term into an Independent Centre for Research in Artificial Intelligence. The CoE-Al had plans to submit proposals to government and private organisations to expand the research and development activities. The initiative. - would result in generation of highly skilled manpower through internships in due course of time, with expertise in artificial intelligence.

#### **National Super Computing Mission**

National Institute of Technology, Tiruchirappalli has been inducted to be part of the National Super Computing Mission (NSM), of the Government of India. The objective of the NSM is to empower technology institutions with high-performance computing capabilities that can be used for solving computationally intensive problems. Based on the proposal submitted by the National Institute of Technology, Tiruchirappalli to the NSM -Infrastructure team, the institution has been sanctioned Supercomputer worth Rs.17.11 Crores by the Department of Science and Technology (DST) and Ministry of Electronics and Information Technology (MeiTY). The supercomputer involving CPU and GPU at a ratio of 70:30 will be installed at the Institute by CDAC. Pune. soon, with an additional installation cost of about 2 crores. This facility will help research scholars and faculty working on projects involving high-end computing in various research projects.







### INDUSTRIAL COLLABORATION

TEXAS INSTRUMENTS	Texas Instruments India Private limited (TI), Bangalore	16-09-2019	3 YEARS
इसरो विश्व	Indian Space Research Organization (STIC & ISRO) Bangalore	29-05-2021	2 YEARS
BHEL	BHEL, Trichy	20-04-2018	5 YEARS
भारतीय विकासनम् प्राधिकरम्	Airports Authority of India (AAI), New Delhi	16-01-2019	INDEFINITE
TATA STEEL	TATA Steel Ltd, Mumbai	24-10-2018	3 YEARS
SETS	Society of Electronic Transaction and Security (SETS), Chennai	20-09-2018	5 YEARS
SCL Sensi-Conductor Laboratory	Semi Conductor Laboratory (SCL), Punjab	08-06-2018	10 YEARS
TATA MOTORS	Tata Motors Limited, Bombay	17-05-2018	5 YEARS
Micron	Micron Technology Operations India LLP, Hyderabad	10-07-2020	2 YEARS
NVIDIA	NVIDIA Corporation, Bangalore (Graphics Private Limited)	23-06-2020	INDEFINITE
ARSEN & TOUBRO	Larsen & Toubro Limited (L&T Construction)	21-02-2019	5 YEARS
MCNOGAN	The University of Michigan, (USA)	12-04-2017	5 YEARS
SANEER	Society for Applied Microwave Electronics Engineering & Research (SAMEER)	23-06-2020	5 YEARS
पूज पूज और नीड़ पुजा के बाद कर कर के किए के पुजा कर के किए किए के किए किए के किए किए के किए किए के किए	National Research Development Corporation (NRDC), New Delhi	28-08-2020	3 YEARS

DATE OF EFFECT

### NOTABLE ALUMNI



Natarajan Chandrasekaran Executive Chairman, Tata Sons



KR Sridhar Founder and CEO, Bloom Energy



Shyam Srinivasan CEO and MD, Federal Bank



Mahendra Durai
Senior Vice President, Chief Technology
Officer of Hearst



Vanitha Rangaraju

Animator, Dreamworks Animation,
Academy Award Winner



Vivek Ravisankar Co-Founder and CEO, HackerRank



Harishankaran Karunanidhi Co-Founder and CTO, HackerRank



Srimathi Shivashankar Corporate Vice President and Head - New Vistas at HCL Technologies.



T. V. Narendran CEO and MD, Tata Steel



Rajesh Gopinathan CEO and MD, Tata Consultancy Services



Siva Sivaram

President of Technology and
Strategy, Western Digital



Balaji Sreenivasan Founder and CEO, Aurigo

### FOREIGN INTERNSHIPS



**S. N Bose Fellowship** - This program offers an opportunity and funding for the top students of every department to pursue an internship at a university of higher education or a research centre in the USA.



MITACS Globalink - This programme offers opportunities and financial aid to Indian students who wish to do an internship at a university of higher education in Canada.



**CHARPAK** - This programme offers opportunities and financial aid to Indian students who wish to do an internship at a university of higher education in France.



**DAAD-WISE** – This programme offers opportunities and financial aid to Indian students pursuing a degree in the fields of science and engineering who wish to do an internship at a German higher education institution or at a research institute.



NTU - India Connect - This programme offers a university-wide short-term research to undergraduate and graduate students willing to pursue higher learning at NTU Singapore, helping them to work with NTU faculty and develop a strong research interest and expertise in preferred field.

NITT offers following Undergraduate courses:

- B.TECH. (BACHELOR OF TECHNOLOGY)
- B.ARCH. (BACHELOR OF ARCHITECTURE)

The B.Tech programme offers Major Degrees in the following disciplines:

- · Chemical Engineering
- · Civil Engineering
- Computer Science and Engineering
- Electrical and Electronics Engineering
- Electronics and Communication Engineering
- Instrumentation and Control Engineering
- · Mechanical Engineering
- Metallurgical and Materials Engineering
- · Production Engineering

Salient features of the programme offered:

#### FLEXIBLE CURRICULUM

- Choice based curriculum with honors and minors.
- Flexibility in content delivery, flipped classroom (Digital mode).
- Flexibility in modes of assessment for every subject.
- Leading to a deterministic course plan.
- Teacher- Facilitator, Students learning at their phase.

#### MINOR ELECTIVES

In addition to the Major Degrees in the above-mentioned disciplines, students have the provision to pursue Minor Elective Courses as a specialization, offered by departments other than their Major.



### ARCHITECTURE

The Department of Architecture in the National Institute of Technology, Tiruchirappalli, grew to what it is today from humble beginnings and was established in the academic year 1980-81, with 3 faculty members and minimal infrastructure. Over the course of 4 decades, it stands today where faculty members from all the important branches of architecture contribute to the students coming from various walks of life, with facilities and evolution of a work culture enabling students to be successful in their curricular and co-curricular activities.

There is a myriad of facilities set up in the Department of Architecture today, the Computer Lab, Building Science and Construction Lab, Model Making Workshop, Laser cutting Lab, Acoustic and Photography Lab along with an integrated Books and Materials library and a Construction Yard for practical understanding.

Theory Courses: Principles of Architecture, History of Architecture, Contemporary Architecture, Building Structures and Structural Systems, Estimation and Specification, Building Economics and Construction Management, Landscape Architecture, Architectural Acoustics, Climate Responsive Architecture, Energy Efficient Buildings, Disaster Resistant Building Design and Management, Building Bye-Laws and Codes of Practice; HVAC, Lighting, Water Supply and Drainage Services.

Lab Courses: Computer Applications in Architecture, Strength of Materials, Model Making, Professional Practice
Practical Courses: Architectural Design, Architectural Graphics, Building Construction and Materials, Surveying and Site Planning,
Architectural Working Drawings, Vernacular Architecture, Environmental Control and Design, Urban Planning.



### CHEMICAL ENGINEERING

Chemical Engineering department, NITT is recognized as one of the leading departments offering B.Tech. (Chemical Engineering), M.Tech. (Chemical Engineering), M.Tech. (Process Control and Instrumentation) in collaboration with ICE department, and Ph.D. programme. The National Board of Accreditation (NBA) has granted all PG and UG courses offered by the department, the A (+3) certification for 3 years. The curriculum is revised periodically to fulfill the current requirements and developments in the process industries and International & national research organizations.

The Department has initiated interaction with Industry to set up pilot plant which is being equipped with the state of the art instrumentation to validate the design models and evaluate the process parameters. The department provides service through consultancy projects and continuing education courses in identified research areas.

**Theory Courses:** Fluid Mechanics, Chemical Engineering Thermodynamics, Particulate Science and Technology, Chemical Reaction Engineering, Process Dynamics and Control, Project Engineering and Economics, Mass Transfer, Heat Transfer, Petroleum and Petrochemical Engineering, Process Calculations, Chemical Technology, Safety in Chemical Industries.

Lab Courses: Particulate Science and Technology Lab, Momentum Transfer Lab, Chemical Reaction Engineering Lab, Heat Transfer Lab, Mass Transfer Lab, Process Dynamics and Control Lab, Instrumental and Thermodynamics Lab

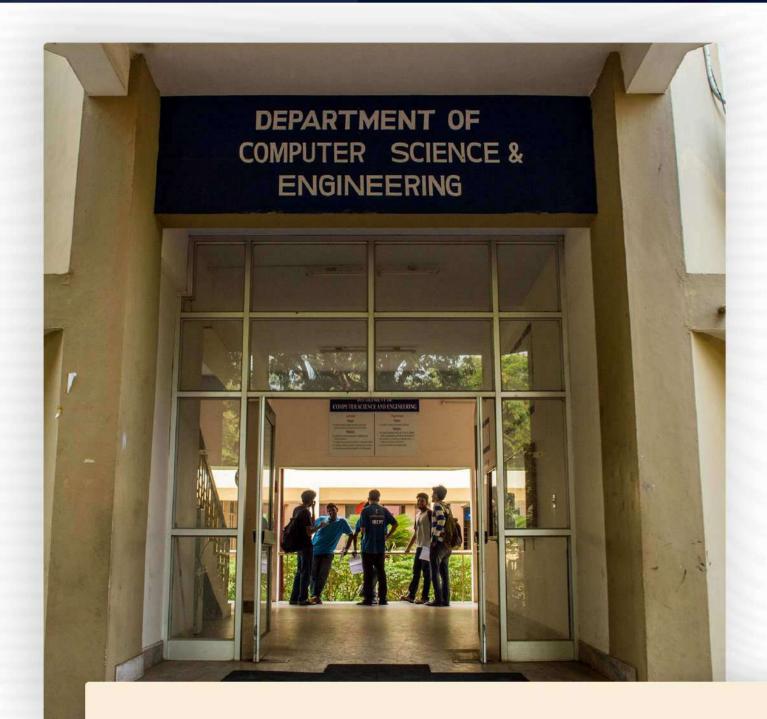


### CIVIL ENGINEERING

Established in 1964, the department of Civil Engineering is one of the oldest and finest departments of the Institute. The vision is to shape infrastructure development with societal focus. Its mission is to achieve International recognition by developing professional Civil engineers, offering continuing education and interacting with industry with emphasis on R & D. The department has labs equipped with cutting edge machinery and instruments. The highly experienced faculty of the department contribute immensely to academic research. Many research papers have been presented in reputed international conferences by the faculty and the students. Graduates of the Programme will contribute to the development of infrastructure that is sustainable and will be professional Civil Engineers with ethical and societal responsibility.

Theory Courses: Concrete Technology, Hydrology and Water Resources Engineering, Geotechnical Engineering, Analysis of Indeterminate Structures, Transportation Engineering, Advanced Steel Structural Elements, Railway, Airport and Harbour Engineering, Advanced Reinforced Concrete Design, Advanced Foundation Engineering, Environmental Engineering, Fluid Mechanics, Survey & Advanced Surveying.

Lab Courses: Strength of Materials and Concrete Laboratory, Fluid Mechanics Laboratory, Environmental Engineering Lab, Transportation Engineer Lab, Computational Lab, Building Planning & Drawing.



## COMPUTER SCIENCE & ENGINEERING

The Department of Computer Science and Engineering with its cohesive team of faculty members, offers a sound program at the UG as well as the PG levels. The curriculum is a blend of the conventional and the radical. It is updated regularly to keep up with the growing demands and the changing trends of the software industry and research laboratories. Core courses include Programming Languages, Computer Architecture, System Software, Networking Technologies and Artificial Intelligence. Mission of the department is to impart knowledge in the state of art in Computer Science and Engineering with relevant theoretical basis. To participate in the design and development process in R & D establishment and industry, to promote research of international quality.

**Theory Courses:** Data Structures, Introduction to Algorithms, Combinatorics and Graph Theory, Computer Architecture, Database Management Systems, Internetworking Protocols, Operating Systems, Principles of Cryptography, Artificial Intelligence

Lab Courses: Algorithms, Mobile Application Development



## ELECTRICAL & ELECTRONICS ENGINEERING

The Department of Electrical and Electronics Engineering, NIT, Tiruchirappalli was started in the year 1964. Thus, the department has dedicated and state of the art teaching / research laboratories. The department is recognized for excellence in research (First Department in NIT-T to be accorded QIP status for Ph.D. program), teaching and service to the profession.

The faculty members have a strong sense of responsibility to provide the finest possible education for both graduate and undergraduate students. The academic strength of the faculty is reflected by the alumni, many of whom are in the top echelons of industry and academia both in India and abroad.

The department has proven its excellence in research by publishing many papers in highly reputed Journals and transactions.

Theory Courses: Electrical Machines, Linear Integrated Circuits, Control Systems and Network Theory, Microprocessors and Microcontrollers, Power System Protection and Switchgear, VLSI Design, Power Electronics, Transmission and Distribution.

Lab Courses: Electronic and Integrated Circuits Laboratory, Synchronous and Inductions Machines Laboratory, Micro-computing and VLSI Design Laboratory, Power Electronics and Systems Laboratory.



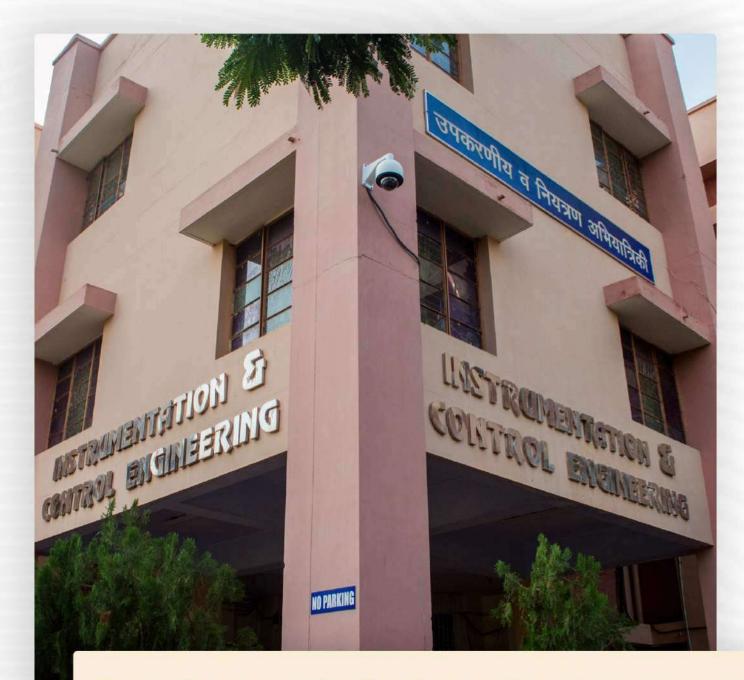
# ELECTRONICS & COMMUNICATION ENGINEERING

The Electronics and Communication Engineering (ECE) Department was established in the year 1968. The department offers Undergraduate (UG), Post Graduate (PG), M.S. (By Research) and Ph.D degree programs that provide students with the knowledge and tools they need to succeed in Electronics and Communication Engineering. Research in the department focuses on high-impact disciplines: Communication systems, Wireless networks, Signal and Image Processing, RF MEMS and MIC, Microwave antennas, Optical communication and Photonics, VLSI technologies.

Our faculty brings state-of-the-art research, development, and design experience into the classroom, ensuring that our students and alumni are able to apply for registration as professional engineers in all parts of global engineering and the scientific community. In all courses the Department has built an excellent reputation for its graduates in terms of placements.

**Theory Courses:** Microprocessors and Microcontrollers, Signals and Systems, Transmission Lines and Wave Guides, Electrodynamics and Electromagnetic Waves, Digital Signal Processing, Digital Signal Processors and Applications, Analog Integrated Circuits, Antennas and Propagation, Network Analysis and Synthesis, Microwave Electronics, Fiber Optic Communication.

Lab Courses: Fiber Optic Communication Laboratory, Microprocessor and Microcontroller laboratory, Digital Signal Processing Laboratory, Digital Electronics Laboratory, Microwave Laboratory



# INSTRUMENTATION & CONTROL ENGINEERING

The Department of Instrumentation and Control Engineering was established in the year 1993. The department has modern labs in the areas of Instrumentation, Sensors and Transducers, Control Systems, Process Control, Embedded Systems, Modelling and Simulations, MEMS and Smart structures. Guided by learned and experienced faculty, the department envisages being a world class school of Instrumentation and Control. It is involved in providing quality education to students with a dynamic curriculum that caters to the ever improving industrial & research needs. It offers one Under-Graduate programme (B.Tech.), Post-Graduate one programme M.Tech. (Industrial Automation) and also research programmes (M.S. and Ph.D.) in the various fields of Instrumentation and Control Engineering for both regular and part-time scholars.

**Theory Courses:** Analog Signal Processing, Microprocessors and Microcontrollers, Industrial Instrumentation, Digital Electronics, Principles of Communication Systems, Instrumentation practices in Industry, Control Systems, Process Control, Logic and Distributed Control Systems, Micro Electro Mechanical Systems, Automotive Instrumentation, Instrumentation and Control for Petrochemical Industries, Digital Control Systems.

Lab Courses: Sensors and Transducers Laboratory, Analog Signal Processing Laboratory, Control Systems Laboratory, Industrial Instrumentation Laboratory, Microprocessor and Microcontroller Laboratory, Process Control Laboratory



### **MECHANICAL ENGINEERING**

One among the first three departments to be established in 1964 in the institute, the Mechanical Engineering Department of NITT has had the reputation of being among the finest in the country and is dedicated towards the advancement of technology and science. Keeping itself up to date with the latest developments and trends in the field and with a dedicated faculty of highly qualified and experienced members in all streams of mechanical engineering, the department consistently strives to provide world class facilities for education and research. An interactive relationship is maintained between the students and staff which enables the students to develop a sound foundation in the stream in a conducive environment. This is also reflected in our campus placement which has been 100% year after year with our students getting placed in the top industrial houses of the country. About 20% of our students proceed to top universities abroad to pursue their higher education. The calibration facilities developed by the department are in accordance with the National Standards for calibration of pressure, temperature and speed measurement. These facilities are utilized by ISO 9000 certified companies.

Theory Courses: Mechanics of Machines, Automobile Engineering, Turbomachines, Power Plant Engineering, Design of Mechanical Drives, Mechatronics, Advanced IC Engines, Manufacturing Technology, Computer Aided Design and Drafting, Engineering Thermodynamics, Biofuels, Strength of Materials, Analysis and Design of Machine Components, Vehicle Dynamics.

Lab Courses: Metrology and Quality Control Lab, Manufacturing Technology Lab, Thermal Engineering Lab and Dynamics Lab



# METALLURGICAL & MATERIALS ENGINEERING

The department of Metallurgical and Materials Engineering (formerly Department of Metallurgical Engg.) admitted the first batch of B.E. students in 1967. Since its inception this department has been one of the premier centers of excellence in the field of Metallurgical and Materials Engineering. It has expanded since then in many ways and now offers three post-graduate programmes with specialization in Welding Engineering, Materials Science & Engineering and Industrial Metallurgy. All the three courses have been attracting candidates with varied engineering backgrounds and also sponsored candidates from engineering industries and academia. Since 2006, the department is admitting candidates for M.S. and Ph.D. programmes with Institute Fellowships. The department faculty are handling projects sponsored by agencies like MHRD, DRDO, AICTE, DST, NRB and Tata Steel. The department is accredited for 5 years by the National Board of Accreditation. The department is also a recognized center for QIP (Quality Improvement Programme) for both M.Tech. and Ph.D. programmes.

Theory Courses: Physical Metallurgy, Strength of Materials, Mineral Processing and Metallurgical Analysis, Metallurgical Thermodynamics, Transport Phenomena, Phase Transformation and Heat Treatment, Iron Making and Steel Making, Metal Casting Technology, Materials Joining Technology, Polymers and Composites, Non-ferrous Extraction, Metal Forming, Corrosion Engineering

Lab Courses: Welding and Foundry Laboratory, Corrosion Laboratory, Mechanical Testing Laboratory, Metallography Laboratory



## PRODUCTION ENGINEERING

Production Engineering is a professional practice of manufacturing technology with management science. The goal is to accomplish the manufacturing processes effectively and efficiently. The Department offers B.Tech. (Production Engineering), M.Tech. (Manufacturing Technology), M.Tech. (Industrial Engineering and Management), M.S. and Ph.D. programmes. Production Engineering Department has obtained the Best Department Award 2019 of the Institute in appreciation of our contribution to the growth of the Institute in the Engineering discipline. UG and PG programmes are accredited by the NBA. Many research papers have been published in journals and conferences. More than 138 Ph.D. degrees were awarded through research guidance by the faculty of Production Engineering. The department offers engineering consultancy in the areas of design, manufacturing and resource management.

Theory Courses: Machining Technology, Kinematics and Dynamics of Machines, Operations Research, Supply Chain Management, Metrology, Design of Machine Elements, Forming Technology, Computer Integrated Manufacturing, Mechanics of Solids and fluid, Casting and Welding, Materials Science, Lean Manufacturing

Lab Courses: Manufacturing Processes Lab, Weldability and Formability, Advanced CNC Lab, Machine Drawing Practice, Computer Aided Design.

### **CLUBS AND STUDENT GROUPS**

#### **DELTA FORCE**



As the official Web Team and programming club of NIT Trichy, **Delta Force NIT Trichy** develops and maintains the institute's official website and handles web related activities of the institute's festivals including the cultural fest, Festember and the technical fest, Pragyan. The club also conducts events and workshops on an annual basis.

#### SPIDER

**Spider**, the Research and Development Club of NIT Trichy is a cluster of like-minded individuals pursuing projects in some of the booming sectors of Artificial Intelligence, Electronics and Computer Technology.

Over the years, Spider has grown leaps and bounds with some of its projects being taken over by the industry. Moreover, Spider has a distinguished set of alumni around the globe who've turned into entrepreneurs by laying the foundation for their start-ups.



#### **PSI RACING**



PSI Racing, the science and technology club, encourages students to think innovatively and invent uniquely. Kickstarted in 2005, this club has scaled great heights in the competitive technical field. The members of this club represent the institute in competitions like BAJA SAE and ESI, wherein over 100 colleges from across the country participate every year. The club has won several accolades over the years, including a best rank of 5/120 in the year 2019.

#### RMI

RMI, the "Robotics and Machine Intelligence" is the official robotics club of NIT Trichy. The club comprises around 40 undergraduate students from various departments with a diverse skill set.

This composition makes it possible to undertake in terdisciplinary research-oriented projects. The projects are chosen by themselves after considering the feasibility, cost and the impact they have.



### **CLUBS AND STUDENT GROUPS**

#### **DESIGNERS' CONSORTIUM**



Designers' Consortium are a aspiring design group of enthusiasts with a perpetual thrust for innovation from various engineering backgrounds. Began journey in 2015 and have passionately advanced become the official Product Designing Club of NIT Trichy. The main aim is to identify key problems that hamper the comfortable living of our society, and provide an answer to their needs. To defy the various odds in the way, design solution satisfying requirements and deliver a product championing the standards is the motto.

#### THE 3RD DIMENSION

The Third Dimension is the aeromodelling club of NITT and primarily deals with motion in the third dimension-the principles of defying gravity and achieving flight. It is a group of aviation and aerospace enthusiasts who model electrically propelled airplanes, drones and hovercrafts. Taking part in different competitions, the club actively engages in contests that involve path planning, image-processing and other miscellaneous applications of electronics and coding to make aerial vehicles smarter. It also takes up projects that involve applications of aerodynamics to solve real world problems.



#### THE ENTREPRENEURSHIP CELL



The Entrepreneurship Cell-NIT Trichy is a student run non-profit organization which has been fostering innovation and entrepreneurship within the campus and all over India among students for more than a decade.

- Whether it be through events, guest lectures, workshops, the underlying principles have always remained the same, driven forward by a dedicated team of 60 strong individuals.
- With the scale of what we aim to accomplish only growing with every passing year, we inspire a new generation of students to take us to greater heights.

#### 180 DEGREES CONSULTING



They help organizations with well-researched strategy recommendations that help them flourish, thereby creating a lasting impact in society. With their cohesive team of mentors who have experience in the top consulting firms in the world, the team is ready to tackle real-world challenges



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### **CLUBS AND STUDENT GROUPS**

#### DATABYTE



DataByte is the data science and machine learning club of NIT, Trichy. They focus on solving real world problems using the latest tech, taking up projects having social and business impact, involve in research, use modern software engineering practices and believe in knowledge sharing.

· Their work spans the domains of data science, machine learning, business analytics, deep learning, AI and big data. As we grow, we aspire to take up initiatives which empower students, people, and our country as whole

#### **PROFNITT**

**ProfNITT** focuses empowering students in the field of Finance and Investment by providing them knowledge, resources, and practical through experience collaborations and mentorship esteemed industry by an network sharing the same enthusiasm. They work in various domains of finance like Investment Banking, Private Equity and Venture Capital, Hedge Funds and Fin-Tech. The club conducts several events throughout the year to engage with the student community such as Guest Lectures and Webinars, Workshops and Case Solving Competitions.



#### **ENACTUS**



an international Enactus is organization that promotes social-entrepreneurship by creating businesses that leverage modern technology and attempt to better the society by directly fulfilling the UN's indicators of Human Development, such as creating jobs, providing access to clean water, fighting climate change and more.

The NIT Trichy chapter of Enactus provides students the opportunity to make a meaningful change using their engineering prowess and business acumen

#### GRAPHIQUE

Graphique, the graphic designing club of NIT Trichy, aims to spread the message of Design Thinking. With its activities primarily centered around creating artworks for the institute's Festember festivals Pragyan, they also take up campus development initiatives to help everyone learn Graphic Design, through workshops and bootcamps by leading graphic designers. Mentored by our alumni, who are professional graphic designers, the members of the club also take up various industrial and real-life problem statements and engage with the global community on a regular basis to collaboratively solve the problem statements.



### **FESTIVALS**



Festember ® is the annual cultural festival of the National Institute of Technology, Tiruchirappalli. It's a 4-day event held in the month of September/October. Founded in the year 1975 as a zero-budget fest, Festember has exponentially grown since then with the help of sponsorships and collaborations to become one of the largest cultural festivals of South India.

Every year, more than 10,000 students from over 500 colleges across India attend the fest and its wide range of events, competitions, workshops, guest lectures and ProShows.

Entirely run by students with the support from the institute administration, it imparts important life skills like leadership, team management and communication to its members who make up the different teams of the fest.



Pragyan ® is the international techno-managerial organization of National Institute of Technology, Tiruchirappalli. With its four-day annual fest, Pragyan provides a platform for students to showcase their technical ingenuity and prowess.

It is one of the three organizations and also the only student-run organization to have the ISO 20121:2012 Certification for Sustainable Event Management, in addition to the ISO 9001:2015 Certification for Quality Management Systems.

The fest succinctly captures the exuberance of the technical and managerial worlds and attracts a multitude of participants and sponsors from across the globe each year.



NITTFEST is the annual interdepartmental cultural festival of NIT Trichy. Spanning three and a half days, NITTFEST has evolved with every edition, with the latest edition witnessing over 84 events. It is a complete cultural extravaganza with theme related design and musical events.

**Sportsfete** is the annual inter-departmental sports festival of NIT Trichy. The best sportspeople from all the departments of the institute come together and compete in 19 sport categories, ranging from cricket, football and swimming to kho-kho, handball and water-polo, marathon.

During this time, the atmosphere is intensely competitive with all departments on a war footing to claim the coveted overall trophy. The department with the highest points after Sportsfete and NITTFEST is crowned the Overall Champions.

CAMPUS PLACEMENT BROCHURE 2022 - 23

### ACHIEVEMENTS

### STUDENTS AND DIFFERENT STUDENT CLUBS



- Google Hashcode AIR 8, Global rank 97
- NIT Trichy Team wins Etherpunk '21
- Winner at MIT Bitcoin expo hackathon
- NIT Trichy Team wins SIH 2020
- NIT Trichy Team qualifies for the International Finals of HSBC
- Winners of CAFTA EY Case Championship 2020, a national case study competition organized by Ernst & Young Global Limited.
- All India First Rank in the P&G Case Study Competition.

### INFRASTRUCTURE







LIBRARY



ORION







**OCTA** 



**OJAS** 



**BARN HALL** 



**BASKETBALL COURT** 

### INFRASTRUCTURE



GJ CONVENTION HALL



HOSPITAL



MIG



**GUEST HOUSE** 



CCD



GYM



**SWIMMING POOL** 



**NSO GROUND** 

The Department of Training and Placement is the marketing division of the institute. Over the years, the department has been acting as an interface between institute and companies, maintaining symbiotic, vibrant and purposeful relationships with industries across the country.

As a result, it has built up an impressive placement record both in terms of percentage of students placed as well as number of companies visiting the campus. The department hosts companies on campus and ensures that every aspirant is assured of a bright career of their choice.



## FUNCTIONS & RESPONSIBILITIES

- It nurtures industry-institute interaction by organizing and coordinating frequent industrial visits.
- Organizes in-plant training and projects of industrial relevance for the students with the sole aim of zeroing down the hiatus between the industry and the academia.
- Coordinates campus placement program to fulfil its commitment of a career to every aspirant. Helps every student define their career interest through individual expert counselling.
- · Works toward continuing education for the employees.
- Receives and forwards the feedback pertinent to curriculum improvement from the visiting companies to the faculty to ensure that the curriculum follows the latest industrial trend.

CAMPUS PLACEMENT BROCHURE 2022 - 23

### HOSTING COMPANIES ON CAMPUS

#### **OVERVIEW**

The department provides facilities for the visiting companies to conduct pre-placement talks, written tests, group discussions and interviews. Audio visual aids like laptops, LCD projectors for pre placement talks and internet facilities for online tests are arranged upon prior intimation.

Conveyance from/to airport or railway station is arranged by the department. Accommodation and food are provided at the institute guest house for the company on prior intimation and the cost of these are borne by the institute.

In case the company executives wish to stay outside the campus all arrangements for their accommodation are made but costs are to be borne by the company.





#### LIST OF FACILITIES AVAILABLE

#### Facilities for conducting online processes:

650+ high end computers spread over state-of-the-art labs, Octagon, Twinnet, and Third-I, operating 24/7.

### Facilities for conducting Pre-Placement Talks/Seminars/Workshops:

Halls with combined capacity of 600+ are available for conducting pre-placement talks with audio visual aids like laptops and LCD projectors.

#### Facilities for conducting Group Discussion/ Personal Interviews:

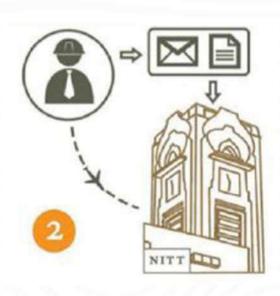
Capstone, the office of Training and Placement, NITT, has a number of rooms with 24/7 high-speed internet connectivity, for the smooth conduct of GDs and Pls, among other processes.



### PLACEMENT PROCESS

**Invitation:** The Placement Office sends invitations to companies/organizations along with the UG and PG brochures and Pre-Visit Response (PVR) sheet through mail.





Revert with Pre-visit response: Interested companies will revert with a filled-in Pre-Visit Response (PVR) sheet which contains details such as job description, streams, eligibility criteria, compensation details and the selection

Notification to students: Students are notified about the company requirements and the list of the interested candidates will be collected and the same is forwarded to the company. Dates will be allotted for the selection process on campus



CAMPUS PLACEMENT BROCHURE 2022 - 23

### PLACEMENT PROCESS



PPT and Placement Process: The Training and Placement Department will provide audio-visual requirements such as laptops and LCD projectors for Pre-Placement Talks before the placement procedure begins. Pre-Placement Talk is followed by the placement process as per the company's requirements

Results and Offer Letters: After the completion of the placement process, the company is required to give the list of the selected candidates to the Training and Placement Department on the same day itself. Offer letters can be sent to the Training and Placement Department to the address mentioned in the last page of the brochure through courier.



### PAST RECRUITERS



### HOW TO REACH NITT

### BY AIR

From	То	Flight Name	Departure	Arrival	
Chennai	Tiruchirappalli	Indigo 6E 7127	01:00 PM	02:20 PM	
Chennai	Tiruchirappalli	Indigo 6E 7145	09:55 AM	11:10 AM	
Chennai	Tiruchirappalli	Indigo 6E 7149	08:10 PM	09:15 PM	
Bangalore	Tiruchirappalli	Indigo 6E 7246	04:45 PM	06:05 PM	
Bangalore	Tiruchirappalli	Indigo 6E 7236	07:05 PM	08:25 PM	

### BY RAIL

From	То	Train Name	Train Number	Departure Time	Arrival Time	Travel Time
Madurai	Trichy	Tejas Express	22672	15:00	17:00	2hrs
Madurai	Trichy	Vaigai Express	12636	7:00	9:10	2hrs 10mins
Madurai	Trichy	Anuvrat Express	22631	11:55	14:05	2hrs 5mins
Chennai	Trichy	Vaigai Express	12635	13:20	18:30	5hrs 10mins
Chennai	Trichy	Pallavan Express	12605	15:45	21:20	5hrs 35mins
Chennai	Trichy	Pandian Express	12637	21:20	3:10	5hrs 50mins
Chennai	Trichy	Pearl City Express	12693	19:15	1:10	5hrs 55mins
Chennai	Trichy	Nagercoil Express	12667	18:50	0:45	5hrs 55mins
Chennai	Trichy	Tuticorin Express	6035	22:45	5:55	7hrs 10mins
Chennai	Trichy	Madurai Express	22623	22:45	5:55	7hrs 10mins
Bangalore	Trichy	Mailaduturai Express	16232	19:15	3:55	8hrs 40mins
Bangalore	Trichy	TPJ Humsafar Exp	22497	3:55	11:20	7hrs 25mins
Bangalore	Trichy	Velankanni Exp	17315	23:12	8:10	8hrs 58mins





Scan to view and save the location

### PLACEMENT **TEAM**

#### RAHUL MELKANI

Chemical Engineering

#### **ANSH AGRAWAL**

Civil Engineering

#### SATYAMURTI DODDINI

Computer Science & Engineering

#### **GOKULAN V**

**Electrical & Electronics Engineering** 

#### YASH CHAUDHARI

**Electronics & Communication Engineering** 

#### RAMKUMAR BHARAT

Instrumentation & Control Engineering

#### ABHINAVA RAMANAN G

Mechanical Engineering

#### **AVINASH KUMAR**

Metallurgical & Materials Engineering

#### **GAYATRI KUMARI**

Metallurgical & Materials Engineering

#### KARAN RAAHUL G

**Production Engineering** 

#### **RAJU ROY**

Architecture

