

15<sup>th</sup> November 2016

### Under Graduate Minor Programme

KLE Technological University strives to produce Engineers with multidisciplinary skills and abilities, to succeed in the technologically complex world. Earning a minor programme certificate along with engineering major degree is a great way to broaden education, enhance technical, managerial and business skills. Minors are intended to encourage and officially acknowledge the attainment of a fair measure of expertise and knowledge in more than one academic field, with the goal of broadening a student's education, and have an advantage in the competitive job market.

KLE Tech offers multi-term, on campus minors consisting of 15 Credits of course work specified by the School / Department / Centre offering the minor programme.

#### Minor Programmes offered during the every academic year:

Sl.	Minor Programme	Offering School / Department / Center	Eligible Students (III Semester )	Brief information about the Minor	Coordinator
1	Entrepreneurship	CTiE	All branches	<p>The minor in entrepreneurship enables students to ideate, build and grow their own start-ups through experiential learning</p> <p>Value Proposition:</p> <ul style="list-style-type: none"> <li>• Rigorous mix of theory and practice</li> <li>• Interactive learning environment through team-based projects/ activities</li> <li>• Facilitates Networking, interaction with entrepreneurs and investors</li> </ul>	Dr. Nitin Kulkarni and Prof.Soumya Kudagi.

				<ul style="list-style-type: none"> <li>Help build start-ups</li> </ul>	
2	Computer Science & Engineering	School of Computer Science	All branches, except CSE	<p>Minor in Computer Science &amp; Engineering is designed for students aspiring to equip themselves with computing knowledge to enhance and compliment their major disciplines. Ubiquitous nature of computing which demands this knowledge from every aspiring engineer, offers better career opportunities.</p>	Dr.D.G. Narayan
3	Electronics	School of Electronics	Mech., Civil, CSE, A&R.	<p>The all-pervasive presence of Electronics and Embedded systems in every engineering application and walk of life requires an aspiring engineer to acquire an increasingly cross disciplinary proficiency and skill set. The Minor in Electronics is specifically designed to enable the students from the non-circuit disciplines to develop their basic competence in Electronics relevant to their major disciplines, enhancing their career opportunities.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>Understand the fundamentals of Electronics through courses on analog and digital design, signal handling and embedded systems.</li> <li>Analyze, interface and control sub-systems required for present day system design and applications.</li> <li>Prepare for technical competence in electronics, focusing on better job opportunities and advanced studies.</li> </ul>	Mr Raghavendra M. Shet

4	Innovation and Product development	Centre for Innovation and Product Development (CIPD)	All Branches	The goal of Minor in Innovation and Product development is to educate next generation of product developers and innovators — people who are able to work across domains and industries, identify convergences, and create impact through innovative designs and product development. Our students will develop capability for taking a unified approach to solving problems, drawing on skills from engineering, marketing, and business analytics.	Prof Ravi Guttal & Mr Ashwin R Kubasadgoudar
5	Robotics	Dept. Of Automation & Robotics	All branches except A&R	The Robotics minor aims to provide a fundamental understanding of the field of robotics to undergraduate students interested in pursuing careers or graduate degrees in this field, or in acquiring a multidisciplinary education. The field of robotics integrates sensing, information processing, and movement to accomplish specific tasks in the physical world. Applications of this field appear in many areas including manufacturing, disaster recovery, space exploration, ordinance disposal, deep-sea navigation, home-care and home-automation.	Mr Shridhar Doddamani
6	Automotive Engineering	School of Mechanical Engineering	All Branches	The main aim of the programme is to equip the students with the knowledge necessary to design, build, test and validate a vehicle. The individual courses begin with introducing the students to different vehicles, automotive components and systems and their need and functionality. With this fundamental knowledge the student then learns the impact of these automotive components and systems on vehicle handling	Prof. Aditya Deshpande

				and behaviour in the succeeding course. In the next stage the student is exposed to the essentials of Electrical and Electronic control systems in a vehicle. Design and development of powertrain and drivetrain systems complete the system knowledge necessary to work on an entire vehicle. The programme finally culminates with the student testing and validating a given vehicle for competition.	
7	Bioengineering	School of Mechanical Engineering	All Branches	Bioengineering is the interface between engineering and medicine. Working with doctors, clinicians and researchers, bioengineers use traditional engineering principles and techniques and apply them to real-world biological and medical problems. The Minor Program in Bioengineering is specifically designed to provide integrating experiences to the students through various areas of biology, medicine and engineering. The proposed Minor Program offers excellent career options in the areas of biomedical, health care and regenerative technology that demand a lot of engineering skills.	Dr. V.N.Gaitonde

- This program extends for a period of **two academic years** & will run concurrently with the regular BE program, starting from the IV Semester.
- The minor programme shall consist of 5 courses with a minimum of 15 Credits as specified by the School / Department / Centre offering the minor.
- Minors must be in a field(s) outside of a student's major field(s).
- Students can register for only one minor.

- Number of seats available for each minor programme: 30 /40 as decided by the offering School/ Dept. / Centre.
- Students can contact the Faculty Coordinator of School / Dept. / Centre for any clarifications.

**Eligibility for applying to Minor Programme:**

- Students should have minimum CGPA of 6.75 without any backlog.

**Fees for the Minor Program:** Rs 20,000 payable in two instalments of Rs 10,000 per year.

**Applications are invited from the students of III semester.**

- Last date for submitting hard copy of application to the offering School / Dept. / Centre: Will be announced as per the schedule.
- Announcement of Selected list of candidates: Will be announced as per the schedule.
- Payment of fees by selected students: Will be announced as per the schedule.

[Download posters of Minor Programs -- link](#)

[Download Application Form for Minor Programme --- link](#)



Dean, Academic Affairs,

  
Registrar