



# Somaiya Vidyavihar

## K. J. Somaiya Institute of Engineering and Information Technology



NAAC Accredited Institute with 'A' Grade

NBA Accredited 3 Programs

(Computer Engineering, Electronics & Telecommunication Engineering and Electronics Engineering)

Best College Award by University of Mumbai, Urban region, A.Y. 2018-19

Permanently Affiliated to University of Mumbai, Approved by D.T.E., A.I.C.T.E.

UGC Recognized Institute under section 2(f) and 12 (B) of the UGC Act, 1956

### **ADDITIONAL FACILITIES**

Sr. No.	Facility	Reason(s) for creating facility	Utilization	Area in which students are expected to have enhanced learning	Relevance to POs/PSOs
1	Departmental Portal, Facebook webpage / Dept. webpage	To inform all faculty, staff and students about their achievements in the department. Also to make aware all faculty/staff/students about competitions/Exhibitions/Conferences	All faculty / staff / students of department during college hours	Information about various competitions conducting at University/ National level. Students will participate in Project Competitions / Exhibitions / Conferences	PO9, PO12, PSO 2
2	IoT based laboratory Automation with Institute funding	Students initiative for automation of laboratory fans and tube lights of second floor for saving electricity charges. To build creative skills.	Lab No. 203,205, HOD Cabin 206 and Lab No. 207	Students developed prototype models. Home automation. Low cost models developed for societal and medical applications	PO1, PO2, PO3, PO9, PSO1 and PSO2
3	eYantra laboratory (Institute of IIT Mumbai) and Robotics Lab	Students will learn to develop robotics projects for different applications	Undertaken	Final year students will get exposure to develop robotics projects	PSO1
4	PCB Machine & Laboratory	Students will design any circuit using Eagle software and develop PCB using PCB Machine	All students those want to develop Mini Projects/ BE projects	All students of Department will learn how to use Eagle software for PCB Design and develop PCB using PCB Machine	PO9, PSO1
5	Pre lab Videos	Helping students understand the models, theories, and principles addressed in the lab procedure	Faculty and students of the department in Lab No. 203 and 207	Faculty developed pre lab video for their course. Students are using it during practical performance	PSO 1 and PSO 2
6	LCD Projectors	To improve teaching learning process	60 Hours per week In classrooms & Laboratories	All classrooms for theory lectures as well as project presentations. All subjects which having design and simulations can be easily analysed and visualized.	PO1, PO10, PSO1

7	Google classroom for each course & each class.	<ol style="list-style-type: none"> <li>1. All announcements related to courses displays in classroom.</li> <li>2. Upload course material like notes, PPTs, videos, question bank, conduct MCQ tests, give assignments, conduct module and course exit surveys.</li> <li>3. Easy to use for faculty members to communicate with students.</li> </ol> <ol style="list-style-type: none"> <li>1. classroom application is easy to download on mobile phones</li> <li>2. To provide teaching material, details information about the course and to educate the students beyond classroom learning.</li> <li>3. To provide better understanding of the concepts of the course</li> <li>4. To promote ICT based learning</li> </ol>	Throughout semester, on and off campus is availed by students	<ol style="list-style-type: none"> <li>1. Provide better learning as per the requirements of the course</li> <li>2. Improve the depth in understanding.</li> </ol>	PO1, PO2, PO5
8	Google classroom for Major and Mini projects.	<ol style="list-style-type: none"> <li>1. All project related information such as resource material, announcements, research &amp; publication related details are displayed on the classroom</li> <li>2. Availability of Log Book.</li> <li>3. Upload samples of Project Reports</li> </ol> <p>To communicate with students regular project related activities. To provide guidelines to write research papers, prepare presentations and report writing Regular documentation</p>	Throughout semester, on and off campus is availed by students	<ol style="list-style-type: none"> <li>1. Update project related learning.</li> <li>2. Provide better understanding of report writing and presentation skills.</li> <li>3. Regularity in documentation.</li> </ol>	PO10, PO11, PSO1, PSO2
9	Offee (Offline Entertainment and Education Tool)	<p>Advance Teaching learning tool To conduct online/ offline tests and quizzes after learning the module to evaluate understanding of students To make available for students offline video lectures</p>	In classroom as well as in laboratories, student can access the resources using their mobile phones	<ol style="list-style-type: none"> <li>1. Provide better understanding of courses</li> <li>2. Help student to gain knowledge of respective courses through videos.</li> </ol>	PO1, PO2
10	NPTEL (National Program on Technology Enhanced Learning ) Online certification courses.	<p>8 terra byte video lectures/web data for different courses are available for online study. To enhance the knowledge of the course To provide better understanding of the course using IIT Professors guidance.</p>	Students and faculty utilize this facility as per their requirements for different courses	<ol style="list-style-type: none"> <li>1. Up gradation of the subject knowledge.</li> <li>2. Clarity of the concepts.</li> <li>3. Expert Guidance</li> </ol>	PO1, PO2, PO5, PO12

11	Project Laboratory Hardware / Software	<ol style="list-style-type: none"> <li>To develop undergraduate Mini and Major projects t-guided by faculty members in various domains.</li> <li>Use of Licensed and open source software for implementation of projects.</li> <li>To simulate real time applications <ol style="list-style-type: none"> <li>To implement innovative ideas</li> <li>To Motivates students to come up with prototype/products.</li> <li>Practical implementation of the theoretical knowledge</li> </ol> </li> </ol>	Students and Faculty members utilize all the labs and project lab for their mini project / major projects and research work .	<ol style="list-style-type: none"> <li>Implementation and management of projects</li> <li>Recognize leadership and teamwork.</li> <li>Recognize time management and follow of time line</li> <li>Design-cost effective solutions for problems</li> </ol>	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12, PSO1, PSO2
12	Training for Placement	<ol style="list-style-type: none"> <li>Conduction of Aptitude Tests series using Google classrooms</li> <li>Organization of events related to T &amp; P ,Conduction of Mock interviews</li> <li>Conduction of Finishing school training program <ol style="list-style-type: none"> <li>To provide practice and training of aptitude test</li> <li>To improve communication and presentation skills</li> <li>To help students in building the confidence to face interviews.</li> <li>To get placed in various companies.</li> </ol> </li> </ol>	T& P sessions planned for the entire semester and implemented as one lecture per week for SE,TE and BE to improve their quantitative and qualitative ability for placement .	<ol style="list-style-type: none"> <li>Better Training of the students for better Placements</li> <li>Provide better understanding of the skills required before</li> </ol>	PO6 PO11, PSO1
13	Departmental Library	<ol style="list-style-type: none"> <li>Project /seminar report available in the department library.</li> <li>Google classroom with e-material (project report presentations, Laboratory manuals)</li> <li>Scanned Copy of question papers.</li> <li>To meet the needs of students</li> <li>To provide reference material</li> <li>To refer advanced information for seminar, laboratory projects</li> </ol>	Throughout the semester	<ol style="list-style-type: none"> <li>Provide information about research/ development activities</li> <li>Provide insight into recent trends in engineering projects.</li> </ol>	PO1, PO2, PO3, PO5, PO12
14	Research and Development Laboratory	<ol style="list-style-type: none"> <li>To develop mini and major projects of undergraduate students under the guidance of faculty members in various domains.</li> <li>Individual faculty Projects Development</li> <li>Real time application</li> <li>To create innovative ideas</li> <li>To build the creative skills.</li> <li>Motivates student to come up with projects/products</li> </ol>	In Laboratory 302 throughout the semester	To develop Research based, product based, need based projects, societal project , agricultural based projects under the guidance of faculties .	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12

15	Software for security	1. Licensed copy of Kaspersky Antivirus 2. To provide network security for computer in the laboratories.	Antivirus software under all Laboratories for data protection.	Security Aspect will be learned.	PO12
16	Learning in Laboratories	1. Development of Pre-Laboratory videos, 2. Use of virtual Laboratories prepared 3. To provide introductory and basic information about the experiments related to respective courses	All departmental Laboratories	To provide practical knowledge of respective courses.	PO1, PO2, PO4
17	Internet and Wi-Fi facility	150 Mbps Internet Leased line. WIFI available for enhancing the teaching learning.	All laboratories in the department are on LAN internet connectivity Wi-Fi facility is available for all the students and staff in library, canteen and floor passage. User login and Password is given to all students and staff to avail this facility	1. Upgrade the teaching and learning process 2. Improve the research and development activities 3. Helps to understand the current developments in the field 4. 24x7 access to learning and research using internet.	PO3 PO5 PO7 PO12
18	Institute Level Language Laboratory	1. O'RELL software & Audio video facility 2. To improve Communication Skills & accent	First year students and as per requirement higher class students and faculty tiize same facility	Improved Communication Skills & Listening Skills	PO10
19	Centre of Excellence in Robotic Process Automation, Machine Learning, Artificial Intelligence.	Industry real time projects development in evolutionary technology			
20	<b>Student Cells, Clubs, Professional bodies</b>  Student Council Committee, Software Development Cell, Research Development & Consultancy, Training & Placement Cell, Sports Committee, Professional bodies ISTE, IEEE, CSI, IET, IETE, IEI, Entrepreneurship Development cell, Career Opportunities for Engineers in Public Sector Cell, Cyber Security and Research Cell, Internet of Things Cell, Project Competition Cell, Robotics Cell, Green Club, Cultural Committee, Technical Committee, Industrial Visit, Alumni & Corporate Relation, Intellectual Property Rights Cell, Marathi Bhasha Wagdmay Mandal - Nakshtra, Aura Magazine, NSS Committee, Robocon, E-yantra, Vyom Club (Astronomy), Infinite Loop Club, DrameBaaz team, New Leap Initiative team, Women Development Cell, Student Grievance Committee, Anti Ragging Committee, Anti Ragging squad ,Industry Institute Interaction Cell.				
21	Annual Sports, Technical, Cultural & Oscillation with Institute funding Festivals				
22	Medical Counselor				
23	Robotics cell – National Level Robocon competition Participation with Institute funding				
24	KJSIEIT - INTECH project competition				