

# ARUNAI ENGINEERING COLLEGE



## FACULTY CODE BOOK

## CONTENT

<b>S.NO.</b>	<b>PARTICULARS</b>	<b>PAGE NO.</b>
<b>A.</b>	<b>ABOUT OUR INSTITUTION</b>	<b>3</b>
<b>B.</b>	<b>COURSES OFFERED</b>	<b>4</b>
<b>C.</b>	<b>ORGANIZATIONAL STRUCTURE</b>	<b>5</b>
<b>1.</b>	<b>CODE OF CONDUCT</b>	<b>6</b>
<b>2.</b>	<b>ROLES AND RESPONSIBILITIES</b>	<b>7</b>
	<b>2.1 Head of the Department</b>	<b>7</b>
	<b>2.2 Teaching Faculty</b>	<b>9</b>
	<b>2.3 Laboratory Staff</b>	<b>12</b>
	<b>2.4 Technical Staff</b>	<b>12</b>
	<b>2.5 Faculty Advisor</b>	<b>13</b>
	<b>2.6 Counsellor</b>	<b>13</b>
<b>3.</b>	<b>GENERAL REGULATIONS</b>	<b>14</b>
<b>4.</b>	<b>DRESS CODE AND IDENTITY CARD</b>	<b>14</b>
<b>5.</b>	<b>WORKING DAYS</b>	<b>14</b>
<b>6.</b>	<b>TIME OF WORKING</b>	<b>14</b>
<b>7.</b>	<b>FINANCIAL BENEFITS</b>	<b>15</b>
<b>8.</b>	<b>NON-FINANCIAL BENEFITS</b>	<b>15</b>
<b>9.</b>	<b>PROGRAM OUTCOMES</b>	<b>16</b>
<b>10.</b>	<b>BLOOM'S MODEL</b>	<b>17</b>

## **ABOUT OUR INSTITUTION**

Arunai Engineering College (AEC) was established in the year 1993 by Saraswathi Ammal Educational Trust, to render philanthropic and educational services to the people living in rural areas of Tamil Nadu. The main objective of the trust is to foster quality technical education, research and training in various branches of science and technology and simultaneously inculcate among the youth a sense of discipline so that they can be moulded into competent and talented engineers.

A rapidly changing world is one of the biggest challenges facing today's graduates. New technologies, new working practices and changes in tastes and fashions require graduates who are equipped with flexible attitudes. AEC provides students with the skills to succeed. AEC, a Co-Educational institution is spread out on serene sylvan settings on the Chittor - Cuddalore National Highway, providing a holistic environment, ideal for dedicated study with discipline, away from the hustle and bustle of the modern cities. The serene spiritual atmosphere at AEC helps an individual to discover himself and the contribution he can make to the world. We, at Arunai Engineering College, will bring out and enlighten the hidden technical skills and abilities of youth with highest quality technical education and proper discipline.

Today, the institution has grown immensely and magnificently with an area of 24.66 acres. The college offers eight Under Graduate Engineering programs and seven Post Graduate programs. Arunai Engineering College has been awarded ISO 9001:2015 certification from DNV Netherlands in recognition of its International Quality Standards in technical education. Further to enhance the level of interaction with the industry, Arunai Engineering College has become a member of confederation of Indian Industry.

## **COURSES OFFERED**

### **UNDER GRADUATE COURSES**

#### ***BACHELOR OF ENGINEERING***

1. Civil Engineering
2. Computer Science and Engineering
3. Electrical and Electronics Engineering
4. Electronics and Communication Engineering
5. Mechanical Engineering

#### ***BACHELOR OF TECHNOLOGY***

1. Bio Technology
2. Chemical Engineering
3. Information Technology

### **POST GRADUATE COURSES**

#### ***MASTER OF ENGINEERING***

1. M.E. – Applied Electronics
2. M.E. – Computer Science & Engineering
3. M.E. – Power Electronics & Drives
4. M.E. – Structural Engineering
5. M.E. – Thermal Engineering

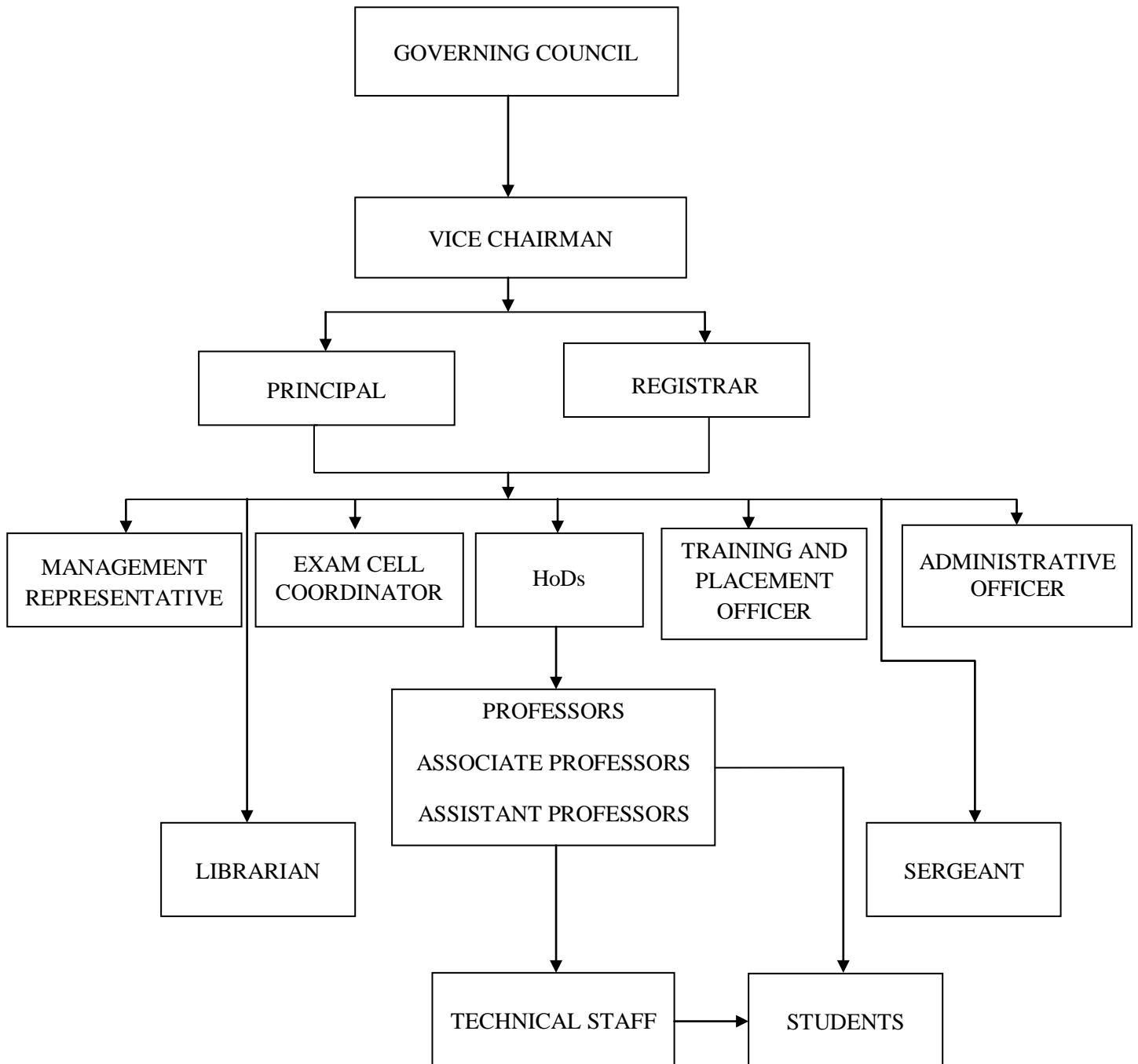
#### ***MASTER OF TECHNOLOGY***

1. M.Tech – Bio Technology

#### ***MANAGEMENT STUDIES***

1. Msater of Business Administration

# ORGANIZATIONAL STRUCTURE



# 1. CODE OF CONDUCT - FACULTY

All employees are expected to get accustomed familiar with the Institution rules and standards of conduct and are expected to follow these rules and standards faithfully in conducting their work.

- Every Employee of the college shall devote his whole time to the college and shall not engage directly or indirectly in any trade or business activity in any other institution which is likely to interface in the proper discharge of his or her duties. This provision shall not apply to academic work like giving Guest lectures, talks or any other work undertaken with the prior permission of the management.
- Every employee shall, at all times maintain absolute integrity and devotion to duty and shall do nothing against the dignity and prestige of the college and shall extend utmost courtesy in his / her relationship with all faculty members, staff, Students and Visitors to the college.
- No employee, without the previous sanction of the Principal/ Management solicit or accept in any way to raise subscriptions in pursuance of any objective whatsoever expect for routine farewell or felicitation functions connected with the college.
- No Staff member of the college shall engage himself / herself in coaching students for any remuneration. No Employee shall, except with the previous sanction of the Principal, accept any remunerative or honorary work not connected with the college.
- No employee shall expect with the previous sanction of the Principal own, wholly or in part, conduct or participate in editing / managing any newspaper or periodical, or any other publication.
- No employee shall take recourse to any organization / forum / courts or the presses in order to vindicate or air his grievances. The Governing Body by the authority vested in it, shall exercise the power, after giving the employee concerned an opportunity to explain his / her case.
- No employee shall invite or participate in strikes or incitement there to pertaining to his service or other conditions, which tends to bring disrepute to the college.
- No employee may absent himself / herself from duty without prior permissions. In case of emergency or proceeding on leave without prior permission, he/ she must explain the circumstances before rejoining duty.
- Every employee shall be at work punctually at the timing fixed unless permitted otherwise by his / her superior
- No employee shall, after reporting for work, be found absent during the course of working hours.
- Mobile phone,Internet and other social media should be used with utmost discretion.

## **2. ROLES AND RESPONSIBILITIES**

### **2.1 HEADS OF THE DEPARTMENT**

#### **a) Setting Vision and Mission of the Department**

- Working in coordination with the Management, Principal and others in implementing the Vision and Mission of the College.
- Defining the Vision and Mission of the Department to be in line with Institutional Vision and Mission.
- Defining the Program Educational Objectives. (PEO)
- Providing a clear vision and direction to the department.
- Formulation of progressive quality objectives for the department.
- Assisting the Principal in all administrative and other matters/as applicable.
- Reporting to the Principal periodically on all matters in respect academics, administration, discipline, Research etc.,

#### **b) Department Administration**

- Coordinating the activities of the faculty and supporting staff in the department to offer quality education to the students and achieve the desired goals of the college.
- Planning and monitoring the overall departmental activities.
- Scheduling the time for the syllabus coverage, internal tests and opening and closing of semesters.
- Arranging for the departmental requirements such as staff, lab equipments, library books, textbooks and other infrastructure facilities.
- Preparing and submitting the annual departmental budget proposals to the Principal, getting necessary approvals and spending the proposed money for department developmental activities and submission of accounts to Principal
- Developing installing and maintaining departmental labs.
- Convening departmental meetings.
- To check the course files of the teachers and suggest corrective measures.
- Maintaining all records as stipulated by NBA / ISO for Accreditation.
- HoD shall fill up the proforma for Performance appraisal for each faculty in the department and submit to the Principal every year along with his / her self assessment form.

**c) Staff Management**

- Motivating and leading the department as a role model.
- Delineation and allocation of responsibilities to faculty and staff.
- Faculty appraisal.

**d) Curriculum Design Activities**

- Setting the Program Educational Objectives. (PEO)
- Publishing the PEOs of the department and disseminating among the stakeholders.
- Achievement of the PEOs.
- Assessment of the achievement of the PEOs.
- Definition and validation of course outcomes and program outcomes.
- Attainment of the POs.
- Evaluation of the attainment of POs.

**e) Curriculum Delivery Activities**

- Ensuring preparation of Time Table and Hall management.
- Consolidation of attendance and internal assessment marks.
- Arranging Guest lectures and Workshops.
- Monitoring the activities and dissemination of information through regular meetings.
- Conduct of periodical class committee meetings.
- Monitoring the activities of the staff including leave matters.
- Conducting Students Symposia / Seminars / Conferences.
- Review of students' performance and remedial measures.
- Arranging Industrial visits and In-plant training for the students.
- Improving departmental library.
- Issue of Bonafide certificates. (Except for Passport and Bank loan)
- Monitoring the Cleanliness of the Department.
- Development of inter-departmental cooperation.
- Purchasing of equipments, testing, quality assurance and processing of bills.
- Purchase and issue of books and stationery items to staff and students and accounting.
- Improving Students' Academic results and initiating remedial measures.
- Counseling of students.
- Conducting value added courses.



#### **f) Research and Publications**

- Motivating and improving research – sponsored development programmes.
- Motivation for paper publications and Ph.D. research.
- Conducting professional society activities.
- To take necessary steps to develop Industry Institute interaction.

#### **g) Mentoring Students and Faculty Members**

- Identifying brilliant and talented students and encouraging them to pursue for higher studies.
- Counseling guiding students and conducting parents meeting if required.
- Identifying and encouraging the faculty to apply for Research projects to different funding agencies and to carry out the consultancy activities successfully.
- Encouraging Students and Faculty for participation in, seminars,conference,workshops and continuing education programmes.
- To become members in professional organizations and to encourage faculty members and students to become members of professional organizations.
- Encourage the staff members to publish papers in National and International Journals having high impact factors.
- Arrange number of continuing education programmes for practicing engineers and workers of the Industry.

## **2.2 TEACHING FACULTY**

### **a) Subject Teaching**

- Teaching subjects as assigned by the HoD after the process of giving the choice of subjects and discussions with HoD on the assigned subjects.
- The teaching load will be allotted by the HoD after taking into account of the Faculty Member's workload.
- Handling classes as scheduled and working for the improvement in student's pass percentage.
- Motivating high performing students to obtain ranks in university examinations.
- Motivating students to involve in co-curricular activities such as paper presentation, model building etc.

- Assessment and Evaluation of Students.
- Preparation of Learning Resource Material:
  - Course / Lesson Plan
  - OHP Transparencies / Power Point Slides
  - Question Bank with Answers
  - Tutorial Problems with Solutions
  - Quizzes, Crosswords and Puzzles
  - Web Based Learning Material
- Regularly involving in Students' Guidance and Counseling.
- Coaching the students to participate in GATE examinations.

**b) Assisting the HoD in Department Administration Activities**

- Assisting the HoD in implementing the activities of the department.
- In addition to the teaching, the Faculty Member should take additional responsibilities as assigned by HoD / Principal in academic, co curricular or extracurricular activities, Research and consultancy works.
- Taking up department activities as assigned by HoD.
- Participation in college level activities in placement cell, exam cell, etc.
- Improvement/Upgradation and maintenance of Laboratories.
- Guiding student projects and exhibits.
- Interaction with Parents.
- Submission of Proposals and Reports.

**c) Professional Development Activities**

- Involving in Professional Development through:
  - Continuing Education
  - Research and publications
  - Interactions with outside world
  - Externally funded R&D Projects and Consultancy Work
  - Creation of Intellectual property rights
  - Industry Institute Interaction
- Each faculty shall fill up the proforma for self assessment and submit to the HOD every year.

#### **d) Class Room Teaching Responsibilities**

- Every Faculty Member should maintain student's attendance records and the absentees roll number should be noted every day in the Master attendance Register maintained in the Department as soon as the classes / laboratory hours are over.
- Whenever a Faculty Member intends to take leave, the Faculty Member should get the leave sanctioned in advance and with proper alternate arrangements made for class / lab/ invigilation. In case of emergency, the HoD or the next senior faculty must be informed with appropriate alternate arrangements suggested.
- Faculty Member should make himself / herself presentable and should show no partiality to any segment / individual student.
- Student counsellor must update the student's counselling book regularly and put up for inspection by HoD / Principal as the case may be.
- Once the subject is allotted, the Faculty Member should prepare the lecture hour wise lesson plan.
- He/She should get the lesson plan and course file approved by HoD and Principal. The course consist of preface, previous year university question papers, two model answer scripts for each test / exam question papers. Two model answer scripts for test / exam, Assignments (if any), feedback analysis report etc.,
- Faculty Member's record of attendance and assesment register must be regularly updated and put up for inspection every month by HoD / Principal as the case may be.
- He/She should engage the full 50 minutes and should not leave the class early.
- The Faculty Member should make use of OHP, Power Point Presentation Models and Smart Class Rooms as teaching aids.
- He/She should encourage students to clarify doubts and to ask questions.
- Faculty Member should get the feed back from students and act / adjust the teaching appropriately.
- He/She should take care of academically backward students and pay special attention to their needs by conducting special classes.
- In problem oriented subjects, regular tutorials have to be conducted. The Tutorial problems have to be handed over to the students at least one week in advance of actual class.

- Faculty handling laboratory subjects should correct observations / records then and there or at least before next class.
- Faculty Member should interact with the class advisor or counselor and inform him / her about the habitual absentees, academically backward student, objectionable behavior etc.,
- He/She should always aim for 100% pass results in his / her subjects and work accordingly.
- Faculty Member should motivate the students and bring out the creativity / originality in the students.
- The test papers must be corrected within three days from the date of examination and marks should be submitted to the HoD for forwarding to Principal with remarks.

### **2.3 LABORATORY STAFF**

- The Faculty Member going for laboratory class must perform the experiments personally and be satisfied with the results before asking the students to conduct the experiments.
- When ever possible, additional experiments to clarify or enlighten the students must be given.
- The laboratory manuals shall be prepared and maintained by the lab in charge.
- Maintenance and calibration of experiments shall be carried out periodically.

### **2.4 TECHNICAL STAFF**

- Assisting in installation, operation and maintenance of laboratory equipments and their calibrations.
- Assisting in scheduling and conducting practical and drawing classes.
- Helping in indenting and purchasing of stores and consumables for laboratories and workshops.
- Helping the faculty in research, consultancy and testing works in respect of projects.
- Helping the students in their project works.
- Assisting the faculty in matters relating to design, fabrication and computer work.
- Helping for the supply of water and electricity in the campus.

- Assisting in the operation of telephones, intercom, Internet and Audio Visual aids.
- Taking specific responsibilities at times of organization of functions, workshops and seminars specially assigned to them.

## **2.5 FACULTY ADVISOR**

- Conduct class committee meetings periodically.
- Instruct all the students to attend the classes regularly and to follow the dress code.
- Monitor absentees everyday and submit the list of students having less than 75% attendance to HoD every month.
- Monitor the students attendance in internal assesments and their performance.
- Prepare the list of academically backward students and submit it to the HoD after completion of each internal assesments.
- Motivate the students to present papers in Conferences / Seminars at regional / national level.
- Inform the subject staffs of their class to submit internal assesment marks to the result analysis coordinator with in three days of the concerned subject exam.

## **2.6 COUNSELLOR**

- Monitor the academic performance and discipline of their counselling students regularly
- Instruct the students to avail the leave with prior permission through their parents.
- Instruct the students to avoid unauthorized leave and also to inform their emergency leave through phone call.
- Monitor their students daily classroom activities daily along with faculty advisor.
- Give personal counselling to students for improving their academic performance
- Update the students counselor's book regularly.
- Communicate the attendance particulars and internal marks of students to their parents periodically.
- Assessing student ability by using placement tests and interest inventories.
- Assisting in establishing or clarifying education and career goals.
- Helping students to use college resources to meet their expectations.

### **3. GENERAL REGULATIONS**

- All types of leave and permission should be availed with prior approval. However in exceptional cases, CL or Permission can be availed under intimation to the HOD overphone . The same will be regularized only after submitting proper application on the same day of reporting for duty.
- Without alternative class arrangement details, leave shall not be permitted. For leave requested over phone, the HOD or any other designated staff concerned shall make alternative arrangements under intimation to the Principal.
- Staff members who are getting relieved from the institution are not authorised to avail vacation (Winter & Summer) during the notice period.
- Staff members should enter their staff code in all the official correspondence, leave letters, forms etc.

### **4. DRESS CODE AND IDENTITY CARD**

Employees of the Institution are expected to present themselves in a clean and professional appearance, both inside and outside the Institution.

Following is the dress code for the faculty of Institute:

Gentlemen	: Tucked in shirts and shoes
Ladies	: Saree

It is mandatory for all employees to wear the ID card issued by the Institution, during hours of work.

### **5. WORKING DAYS**

The College shall function from Monday to Saturday except Government holidays and vacation holidays.

### **6. TIME OF WORKING**

The normal working hours for Teaching Faculty is from 09.00a.m to 04.45p.m with a one hour lunch break. Two permissions of one hour duration per month can be availed by a Faculty.

The employees may be required to follow different working hours under special circumstances.

## **7. FINANCIAL BENEFITS**

Staff Members are eligible for the following incentives and rewards, based on their performance, contribution and years of service at the Institution.

- a. For producing more than 90% results in a theory paper: BEST FACULTY AWARD with Rs.5000/- Cash Prize.
- b. Professional Society Life Membership Fee - will be paid by the Management for Faculty members with minimum three years of service in the Institution based on one professional society per staff member.
- c. Paper publication in International Conferences and National Conferences : 100% Registration Fee & On Duty.
- d. Faculty Development Program/Workshop/Seminar: 50% Registration Fee & On Duty.
- e. Supporting Staff Members are offered free computer training.

## **8. NON FINANCIAL BENEFITS**

- Free Transport facilities to and from their home to Institute.
- Free breakfast for supporting staff Members.
- Free Lunch to all the staff Members.
- Car facilities for senior staff members.
- On any medical need, medical room is available in campus.
- Accommodation in hostel for out station employees.
- Free Wi-Fi inside the campus.
- Providing On duty for attending FDP, workshop, training programs and National & International Conferences.
- All non-doctoral faculties are encouraged to get enrolled for Ph.D. program in various Universities.

## 9. PROGRAM OUTCOMES (Pos)

Engineering Graduates will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
2. **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.
3. **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.
4. **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.
5. **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.
6. **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.
7. **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.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **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.
11. **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.
12. **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.



## 10. BLOOM'S MODEL

