



## 7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations, values, rights, duties and responsibilities of citizens

### Constitution of India Syllabus

R-19 Syllabus for Mechanical Engineering JNTUK w. e. f. 2019 – 20



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA**  
KAKINADA – 533 003, Andhra Pradesh, India

### DEPARTMENT OF MECHANICAL ENGINEERING

I Year - I Semester	L	T	P	C
	2	0	0	0

**CONSTITUTION OF INDIA (MC1104)**

#### Course Objectives:

- To Enable the student to understand the importance of constitution
- To understand the structure of executive, legislature and judiciary
- To understand philosophy of fundamental rights and duties
- To understand the autonomous nature of constitutional bodies like Supreme Court and high court controller and auditor general of India and election commission of India.
- To understand the central and state relation financial and administrative.

#### UNIT-I

Introduction to Indian Constitution: Constitution meaning of the term, Indian Constitution - Sources and constitutional history, Features - Citizenship, Preamble, Fundamental Rights and Duties, Directive Principles of State Policy.

#### Learning outcomes:

After completion of this unit student will

- Understand the concept of Indian constitution
- Apply the knowledge on directive principle of state policy
- Analyze the History, features of Indian constitution
- Evaluate Preamble Fundamental Rights and Duties

#### UNIT-II

Union Government and its Administration Structure of the Indian Union: Federalism, Centre- State relationship, President: Role, power and position, PM and Council of ministers, Cabinet and Central Secretariat, Lok Sabha, Rajya Sabha, The Supreme Court and High Court: Powers and Functions;

**Learning outcomes:-**After completion of this unit student will

- Understand the structure of Indian government
- Differentiate between the state and central government
- Explain the role of President and Prime Minister
- Know the Structure of supreme court and High court

#### UNIT-III

State Government and its Administration Governor - Role and Position - CM and Council of ministers, State Secretariat: Organisation, Structure and Functions

**Learning outcomes:-**After completion of this unit student will


- Understand the structure of state government
- Analyze the role Governor and Chief Minister
- Explain the role of state Secretariat
- Differentiate between structure and functions of state secretariat

#### UNIT-IV

A. Local Administration - District's Administration Head - Role and Importance, Municipalities - Mayor and role of Elected Representative - CEO of Municipal Corporation Pachayati Raj: Functions PRI: Zila Panchayat, Elected officials and their roles, CEO Zila Panchayat: Block level Organizational Hierarchy - (Different departments), Village level - Role of Elected and Appointed officials - Importance of grass root democracy

**Learning outcomes:-**After completion of this unit student will

- Understand the local Administration

  
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**DEPARTMENT OF MECHANICAL ENGINEERING**

- Compare and contrast district administration role and importance
- Analyze the role of Myer and elected representatives of Municipalities
- Evaluate Zillapanchayat block level organisation

**UNIT-V**

Election Commission: Election Commission- Role of Chief Election Commissioner and Election Commissionerate State Election Commission:, Functions of Commissions for the welfare of SC/ST/OBC and women

**Learning outcomes:-**After completion of this unit student will

- Know the role of Election Commission apply knowledge
- Contrast and compare the role of Chief Election commissioner and Commissiononerate
- Analyze role of state election commission
- Evaluate various commissions of viz SC/ST/OBC and women

**References:**

1. Durga Das Basu, Introduction to the Constitution of India, Prentice – Hall of India Pvt. Ltd.. New Delhi
2. SubashKashyap, Indian Constitution, National Book Trust
3. J.A. Siwach, Dynamics of Indian Government & Politics
4. D.C. Gupta, Indian Government and Politics
5. H.M.Sreevai, Constitutional Law of India, 4th edition in 3 volumes (Universal Law Publication)
6. J.C. Johari, Indian Government and Politics Hans
7. J. Raj Indian Government and Politics
8. M.V. Pylee, Indian Constitution Durga Das Basu, Human Rights in Constitutional Law, Prentice – Hall of India Pvt. Ltd.. New Delhi
9. Noorani, A.G., (South Asia Human Rights Documentation Centre), Challenges to Civil Right), Challenges to Civil Rights Guarantees in India, Oxford University Press 2012

**E-resources:**

1. [nptel.ac.in/courses/109104074/8](http://nptel.ac.in/courses/109104074/8)
2. [nptel.ac.in/courses/109104045/](http://nptel.ac.in/courses/109104045/)
3. [nptel.ac.in/courses/101104065/](http://nptel.ac.in/courses/101104065/)
4. [www.hss.iitb.ac.in/en/lecture-details](http://www.hss.iitb.ac.in/en/lecture-details)
5. [www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution](http://www.iitb.ac.in/en/event/2nd-lecture-institute-lecture-series-indian-constitution)

**Course Outcomes:**

At the end of the semester/course, the student will be able to have a clear knowledge on the following:

- Understand historical background of the constitution making and its importance for building a democratic India.
  - Understand the functioning of three wings of the government ie., executive, legislative and judiciary.
  - Understand the value of the fundamental rights and duties for becoming good citizen of India.
  - Analyze the decentralization of power between central, state and local self-government.
  - Apply the knowledge in strengthening of the constitutional institutions like CAG, Election Commission and UPSC for sustaining democracy.
1. Know the sources, features and principles of Indian Constitution.
  2. Learn about Union Government, State government and its administration.
  3. Get acquainted with Local administration and Pachayati Raj.
  4. Be aware of basic concepts and developments of Human Rights.
  5. Gain knowledge on roles and functioning of Election Commission

  
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## Professional Ethics and Human Values syllabus

III Year – I Semester

L	T	P	C
0	3	0	0

### PROFESSIONAL ETHICS AND HUMAN VALUES

#### Course Objectives:

- \*To give basic insights and inputs to the student to inculcate Human values to grow as a responsible human beings with proper personality.
- \*Professional Ethics instills the student to maintain ethical conduct and discharge their professional duties.

#### UNIT I: Human Values:

Morals, Values and Ethics – Integrity – Trustworthiness - Work Ethics – Service Learning – Civic Virtue – Respect for others – Living Peacefully – Caring – Sharing – Honesty – Courage – Value Time – Co-operation – Commitment – Empathy – Self-confidence – Spirituality-Character.

#### UNIT II: Principles for Harmony:


Truthfulness – Customs and Traditions - Value Education – Human Dignity – Human Rights – Fundamental Duties - Aspirations and Harmony (I, We & Nature) – Gender Bias - Emotional Intelligence – Salovey – Mayer Model – Emotional Competencies – Conscientiousness.

#### UNIT III: Engineering Ethics and Social Experimentation:

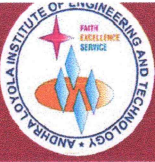
History of Ethics - Need of Engineering Ethics - Senses of Engineering Ethics- Profession and Professionalism — Self Interest - Moral Autonomy – Utilitarianism – Virtue Theory - Uses of Ethical Theories - Deontology- Types of Inquiry – Kohlberg's Theory - Gilligan's Argument – Heinz's Dilemma - Comparison with Standard Experiments — Learning from the Past – Engineers as Managers – Consultants and Leaders – Balanced Outlook on Law - Role of Codes – Codes and Experimental Nature of Engineering.

#### UNIT IV: Engineers' Responsibilities towards Safety and Risk:

Concept of Safety - Safety and Risk – Types of Risks – Voluntary v/s Involuntary Risk – Consequences - Risk Assessment – Accountability – Liability - Reversible Effects - Threshold Levels of Risk - Delayed v/s Immediate Risk - Safety and the Engineer – Designing for Safety – Risk-Benefit Analysis-Accidents.

  
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## UNIT V: Engineers' Duties and Rights:

Concept of Duty - Professional Duties – Collegiality - Techniques for Achieving Collegiality – Senses of Loyalty - Consensus and Controversy - Professional and Individual Rights – Confidential and Proprietary Information - Conflict of Interest-Ethical egoism - Collective Bargaining – Confidentiality - Gifts and Bribes - Problem solving-Occupational Crimes-Industrial Espionage- Price Fixing-Whistle Blowing.

## UNIT VI: Global Issues:

Globalization and MNCs –Cross Culture Issues - Business Ethics – Media Ethics - Environmental Ethics – Endangering Lives - Bio Ethics - Computer Ethics - War Ethics – Research Ethics -Intellectual Property Rights.

- Related Cases Shall be dealt where ever necessary.


### Outcome:

\*It gives a comprehensive understanding of a variety issues that are encountered by every professional in discharging professional duties.

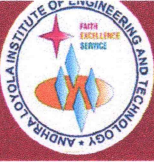
\*It provides the student the sensitivity and global outlook in the contemporary world to fulfill the professional obligations effectively.

### References:

1. Professional Ethics by R. Subramaniam – Oxford Publications, New Delhi.
2. Ethics in Engineering by Mike W. Martin and Roland Schinzinger - Tata McGraw-Hill – 2003.
3. Professional Ethics and Morals by Prof.A.R.Aryasri, DharanikotaSuyodhana - Maruthi Publications.
4. Engineering Ethics by Harris, Pritchard and Rabins, Cengage Learning, New Delhi.
5. Human Values & Professional Ethics by S. B. Gogate, Vikas Publishing House Pvt. Ltd., Noida.
6. Engineering Ethics & Human Values by M.Govindarajan, S.Natarajan and V.S.SenthilKumar-PHI Learning Pvt. Ltd – 2009.
7. Professional Ethics and Human Values by A. Alavudeen, R.Kalil Rahman and M. Jayakumaran – University Science Press.
8. Professional Ethics and Human Values by Prof.D.R.Kiran-Tata McGraw-Hill - 2013
9. Human Values And Professional Ethics by Jayshree Suresh and B. S. Raghavan, S.Chand Publications

  
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**Socially Relevant Projects Syllabus – II year I Semester**

**Socially Relevant Projects Syllabus – III year I Semester**



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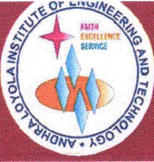
**DEPARTMENT OF MECHANICAL ENGINEERING**

II Year - I Semester	L	T	P	C
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<b>SOCIALLY RELEVANT PROJECT</b>				

Student can choose any one of the given below / any other socially relevant problem and work on it to produce a project document.

1. Water Conservation Related Works
2. Swatch Bharath (Internal External)
3. Helping police
4. Traffic monitoring
5. Teaching Rural Kids (Sarva siksha Abhiyan)
6. Street light monitoring
7. Electricity Conservation
8. Solar panel utilization
9. E- policing & cyber solution
10. Pollution
11. Any social related

  
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III Year - I Semester	L	T	P	C
	0	0	0	0.5
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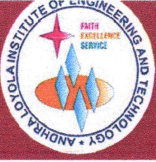
**74<sup>th</sup> Republic Day**

**Event: 74<sup>th</sup> Republic Day Celebrations**

**Date: 26<sup>th</sup> January, 2023**

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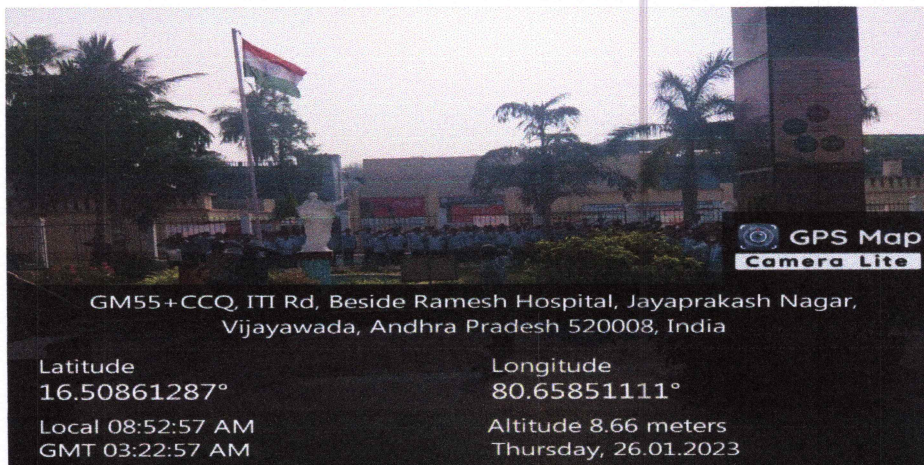
Approved by AICTE, New Delhi and Affiliated to JNTUK-Kakinada


An ISO 9001 : 2015 Certified Institution

Students of ALIET celebrated 74<sup>th</sup> Republic Day on the 26<sup>th</sup> of January, 2023. The students, staff and faculty members filled with a feeling of patriotism and dedication gathered in front of the building. The celebrations started with a prayer. The Principal of ALIET, Dr. O. Mahesh extended his greetings on the occasion of Republic day celebrations. This was followed by a patriotic song sung by Sai Lakshmi and group, a student of ALIET.

The National Flag was hoisted by Dr. S. Mallikarjuna Rao from the Dept. of ECE. The staff and students sung the NATIONAL ANTHEM. The national anthem was followed by two choreographies performed by Anne & Group and Charan & Group. The program ended with a vote of thanks delivered by Sowjanya and Prince Wilson, students of ALIET. Sweets were distributed among all the guests.

## ALIET 74<sup>th</sup> Republic Day Celebrations - 26-01-2023



  
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## International Human Rights Day

**Event: Rally on International Human Rights Day**

**Date: 10<sup>th</sup> December, 2022**

Students of EEE, ALIET organized a program on the occasion of “**International Human Rights Day**” in collaboration with “**Mont Fort social Institute**” at Care and Share School, Ajit Singh Nagar, Vijayawada on 10<sup>th</sup> of December, 2022. The theme of this “**International Human Rights Day**” is the observance of Dignity, Freedom and Justice for all. This program focused on the equality of all human rights and its importance.

Resource person **Mr. G. Rohith, State Executive Committee Member from Human Rights Form** addressed the people and enlighten them by explaining the Rights of each human being, Facts about Human Rights Day like know your rights, think about the children, right to vote etc.

ALIET organized Rally on International Human Rights Day - 10-12-2022



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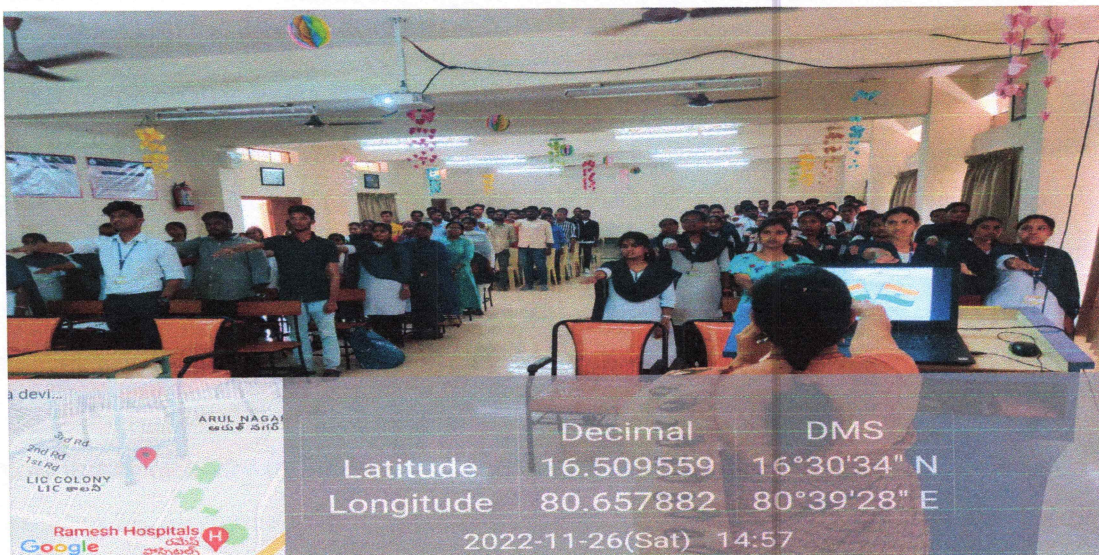
## 73<sup>rd</sup> Constitution Day


**Event: 73<sup>rd</sup> Constitution Day Celebrations**

**Date: 26<sup>th</sup> November, 2022**

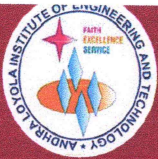
ALIET students and staff celebrated 73<sup>rd</sup> Constitution Day on 26<sup>th</sup> November, 2022 in its premises with a **spirit of patriotism** and love for mother nation. On this occasion, ALIET management commemorated the contributions of the Father of Constitution **Dr. B. R. Ambedkar** and his team. The programme commenced with reading the **Preamble** of the Indian Constitution. Elocution competition was conducted on the theme “**India –Mother of democracy**”. In the competition, students presented with pride the magnificence of Indian Constitution. The programme concluded with prize distribution to the winners.

ALIET organized 73<sup>rd</sup> Constitution Day - 26-11-2022



  
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## Independence Day

**Event: Independence Day Celebrations**

**Date: 15<sup>th</sup> August, 2022**


Every year **15<sup>th</sup> August – Independence Day** is celebrated in **Andhra Loyola Institute of Engineering and Technology**. NSS students presented various cultural events related to the patriots. The event highlighted the preaching of Mahatma Gandhi which inculcates the importance of patriotism for the new generation.

The event began by greetings from **Dr. O. Mahesh, Principal of the institution** of ALIET. In his words he disclosed the importance of freedom and specified that **“Freedom is nothing but a responsibility of every individual towards family and country”**. A patriotic dance was presented by a student Ms. P. Anitha from the ECE department followed by a speech from the chief-guest Dr. K. Siva Rama Krishna, highlighting the importance of the Independence Day. The speech was followed by a patriotic song by Ms. Sumasree and team, the students of ALIET.

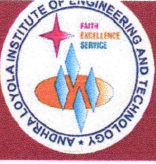
Prizes were then distributed to all the winners of various competitions held on the event **HAR GHAR TIRANGA** as a part of **AZADI KA AMRIT MAHOTSAV**. The programme concluded with a **Vote of Thanks** delivered by **Ramya Reddy** and **Madhumitha Reddy**. Sweets were then distributed among all the staff and the students.

Independence Day celebrations – 15-08-2022



  
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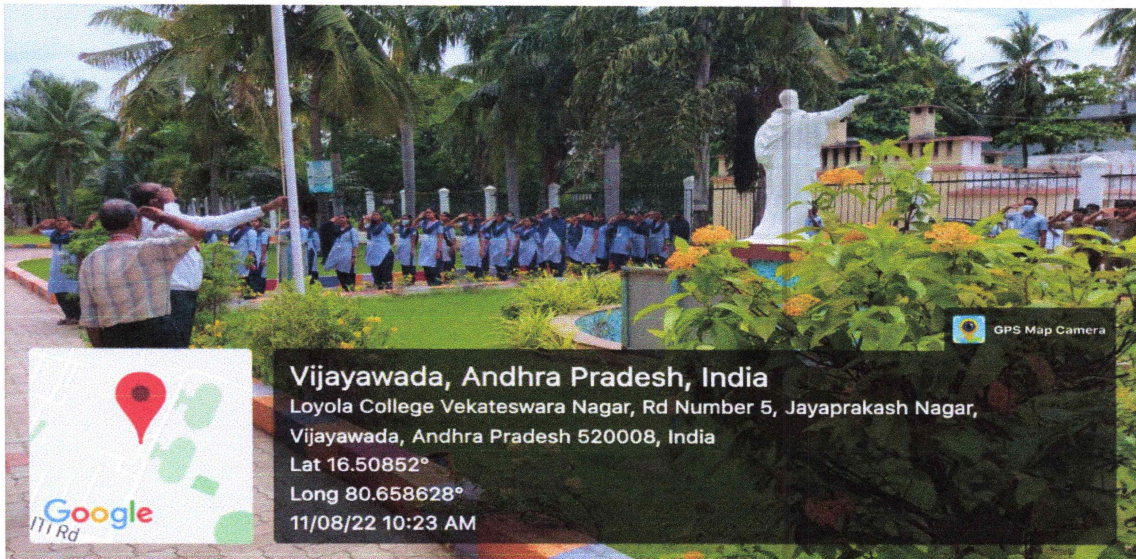
## Independence Day Celebrations Week- Har Ghar Thiranga

**Event: Independence Day Celebrations**

**Date: 11<sup>th</sup> -15<sup>th</sup> August, 2022**

Management, Staff and Students of ALIET celebrated **Independence Day Week** by conducting various **cultural competitions** related to the patriots from **11<sup>th</sup> to 15<sup>th</sup> August, 2022**. Patriotic Solo and Group Dance, Patriotic Solo and Group Singing competitions were conducted on this occasion. Students overwhelmed by exhibiting their talents.

Independence Day Week celebrations Har Ghar Thiranga – 11-08-2022 & 12-08-2022



  
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