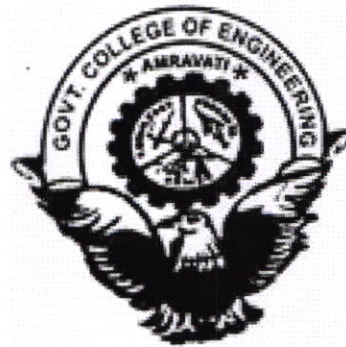


**GOVT. COLLEGE OF ENGINEERING
AMRAVATI**

DEPARTMENT OF ELECTRICAL ENGINEERING



CURRICULUM

For

B. TECH. (Electrical Engineering)

From 2019 – 20 batch

PROGRAM OBJECTIVES

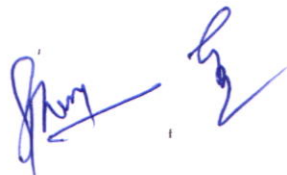
PEO1: Graduates will possess fundamental knowledge of science, mathematics and electrical engineering and demonstrate expertise in problem solving, analysis and design related to electrical systems.

PEO2: Graduates will be suitable to work in private and public sector, electric utilities, various departments of Central/State/Local Governments, various sectors of Indian industries, multinational corporations and one fifth of them will pursue higher education in chosen field of engineering or management.

PEO3: Graduates will be ethical professionals, sensitive to society and engaged in lifelong learning to remain effective members of their communities/teams and will demonstrate leadership and lifelong learning attitude.

PROGRAM OUTCOMES (POs):

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.



B. Tech. (Electrical Engineering)

SEM III													
Category	Course Code	Name of the Course	Teaching Scheme					Evaluation Scheme					Credits
			Theory Hrs/week	Tutorial Hrs/week	Practical Hrs/week	Total	MSE	TA	ESE	ICA	ESE	Total	
HSMC	SHU321C *SHU322C	Transform and Statistical methods Integral Calculus and Probability	3	1	---	4	30	10	60	-	-	100	4
ESC	ETU331C	Analog Electronic Circuits	3	---	---	3	30	10	60	-	-	100	3
PCC	EEU321	Transformers and DC Machines	3	---	---	3	30	10	60	-	-	100	- 3
PCC	EEU322	Electrical Circuit Analysis	3	1	---	4	30	10	60	-	-	100	4
PCC	EEU323	Energy Resources and Generation	3	---	---	3	30	10	60	-	-	100	3
HSMC	SHU322	Constitution of India	1	---	---	0	---	-20	30	---	---	50	0
LC	ETU332C	Analog Electronic Lab	---	---	2	2	-	-	-	50	-	50	1
LC	EEU324	Electrical Machines – Lab I	---	---	2	2	-	-	-	50	-	50	1
LC	EEU325	Electrical Circuit Analysis Lab	---	---	2	2	-	-	-	50	-	50	1
		Total	16	2	6	23	150	70	300	150		700	20

* For Direct second year admitted students