



CIRCULAR

Date: 27/01/2023

All the students are hereby informed that following are the open elective course offered by the departments for the semester 2022-23 even semester.

Department	Course offered		
	Subject code	Subject name	Handled By
Department of Civil Engineering	18CV656	Conservation of natural resources	Dr. Rashmi H R
Department of Mechanical Engineering	18ME651	Non-Conventional energy sources	Vinod A
	18ME653	Supply Chain Management	Harsha J
Department of Computer science	18CS653	Programming in JAVA	Nagaveni Numbal
	18CS654	Introduction to Operating System	Belji T
Department of Electronics and communication	18EC654	Microcontroller	Gopalakrishnamurthy C R

Cc to:

1. HOD, CV
2. HOD, CS
3. HOD, EC
4. HOD, ME

Forwarded to class Teachers ✓
Sem 1 T. Rama
Principal
27/1/23
Dr. K. RAMA NARASIMHA
Principal/Director
K S School of Engineering and Mana
Bengaluru - 560 109
Unk. R. 27/01/23



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DEPARTMENT OF MECHANICAL ENGINEERING

ELECTIVE SUBJECT FOR VI SEMESTER

SESSION: 2022-2023 (EVEN SEMESTER)

Date: 23rd January 2023

Circular

All the students of V semester are hereby informed to provide the elective subjects preferences for the VI semester in the attached sheet by 23/1/2023.

List of electives are given below for your information.

SEMESTER	OPEN ELECTIVE - A	SUBJECT CODE	DEPARTMENT
VI	Conservation Of Natural Resources	18CV656	CIVIL
	Programming in JAVA	18CS653	CS
	Introduction to Operating System	18CS654	CS
	Microcontroller	18EC654	E&C

SEMESTER	PROFESSIONAL ELECTIVE - 4	SUBJECT CODE	DEPARTMENT
VI	Non-Traditional Machining	18ME641	ME
	Composite Materials Technology	18ME645	ME


Head of the Department 23/01/23



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DEPARTMENT OF MECHANICAL ENGINEERING

Option Entry for Open Elective

SI NO	USN	NAME	OPEN ELECTIVE - A			
			18CV656	18CS653	18CS654	18EC654
1	1KG19ME009	JEEVAN R	✓			
2	1KG19ME015	NAVEEN KUMAR R	✓			
3	1KG20ME001	JAYANTH G	✓			
4	1KG20ME002	L A JISHNU	✓			
5	1KG20ME003	MALLIMPATTU VINAY	✓			
6	1KG20ME005	NITHIN R	✓			
7	1KG20ME006	PRANAV VISHWANATH	✓			
8	1KG20ME007	PRATHWIN B R	✓			
9	1KG20ME008	SHREE HARI G	✓			
10	1KG20ME009	VISHNU H M	✓			
11	1KG21ME400	BHARATH KUMAR P	✓			
12	1KG21ME401	CHANDRAKANTH S	✓			
13	1KG21ME402	DARSHAN N	✓			
14	1KG21ME403	DARSHAN S	✓			
15	1KG21ME404	HARSHA L	✓			
16	1KG21ME406	MAHENDRA S	✓			
17	1KG21ME407	MALLIKARJUNA BUDIHAL	✓			
18	1KG21ME408	MANU KUMAR T R	✓			
19	1KG21ME409	MOHAMMED SAQUIB	✓			
20	1KG21ME410	MOHAN KRISHNA V	✓			
21	1KG21ME411	PAVAN G	✓			
22	1KG21ME412	PRAJWAL S	✓			
23	1KG21ME413	VITHESH S	✓			

Head of the Department

24/01/23



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DEPARTMENT OF MECHANICAL ENGINEERING

Option Entry for Professional Elective

Sl NO	USN	NAME	PROFESSIONAL ELECTIVE - 4	
			18ME641	18ME645
1	1KG19ME009	JEEVAN R	✓	
2	1KG19ME015	NAVEEN KUMAR R	✓	
3	1KG20ME001	JAYANTH G	✓	
4	1KG20ME002	L A JISHNU	✓	
5	1KG20ME003	MALLIMPATTU VINAY	✓	
6	1KG20ME005	NITHIN R	✓	
7	1KG20ME006	PRANAV VISHWANATH	✓	
8	1KG20ME007	PRATHWIN B R	✓	
9	1KG20ME008	SHREE HARI G	✓	
10	1KG20ME009	VISHNU H M	✓	
11	1KG21ME400	BHARATH KUMAR P	✓	
12	1KG21ME401	CHANDRAKANTH S	✓	
13	1KG21ME402	DARSHAN N	✓	
14	1KG21ME403	DARSHAN S	✓	
15	1KG21ME404	HARSHA L	✓	
16	1KG21ME406	MAHENDRA S	✓	
17	1KG21ME407	MALLIKARJUNA BUDIHAL	✓	
18	1KG21ME408	MANU KUMAR T R	✓	
19	1KG21ME409	MOHAMMED SAQUIB	✓	
20	1KG21ME410	MOHAN KRISHNA V	✓	
21	1KG21ME411	PAVAN G	✓	
22	1KG21ME412	PRAJWAL S	✓	
23	1KG21ME413	VITRESH S	✓	

Head of the Department

(Signature) 24/01/23



K. S. SCHOOL OF ENGINEERING AND MANAGEMENT - 560 062

CIRCULAR

Date: 15/07/2022

All the students are hereby informed that following are the open elective course offered by the departments for the semester 2022-23 Odd semester.

Department	Course offered		Faculty
	Subject code	Subject name	
Department of Civil Engineering	18CV753	Environmental protection and management	Dr Rashmi H R
Department of Mechanical Engineering	18ME751	Energy and Environment	Mr Prabhu K S
Department of Computer science	18CS752	Python application programming	Mr Deepak M D Mrs Jayasubha J Mrs Nagaveni B Nimbal Mrs Nita Meshram
Department of Electronics and communication	18EC751	Communication theory	Dr Manu

Students are directed to register for any one of the above electives other than offered from the parent department. The registration should be done on or before 30 July 2022 in the parent department.

Syllabus is attached for further information

15.07.22
Principal
15/7/22

CC to:

CSE

ECE

Civil

Mechanical

B. E. MECHANICAL ENGINEERING
Choice Based Credit System (CBCS) and Outcome Based Education (OBE)

Open Elective-B (Semester VII)

ENERGY AND ENVIRONMENT			
Course Code	18ME751	CIE Marks	40
Teaching Hours / Week (L:T:P)	3:0:0	SEE Marks	60
Credits	03	Exam Hours	03

Course Learning Objectives:

- To understand the fundamentals of energy sources, energy use, energy efficiency, and resulting environmental implications of various energy supplies.
- To introduce various aspects of environmental pollution and its control.
- To understand the causes and remedies related to social issues like global warming, ozone layer depletion, climate change etc.
- To introduce various acts related to prevention and control of pollution of water and air, forest protection act, wild life protection act etc.

Module-1

Basic Introduction to Energy: Energy and power, forms of energy, primary energy sources, energy flows, world energy production and consumption, Key energy trends in India: Demand, Electricity, Access to modern energy, Energy production and trade, Factors affecting India's energy development: Economy and demographics Policy and institutional framework, Energy prices and affordability, Social and environmental aspects, Investment.

Module-2

Energy storage systems: Thermal energy storage methods, Energy saving, Thermal energy storage systems
 Energy Management: Principles of Energy Management, Energy demand estimation, Energy pricing
 Energy Audit: Purpose, Methodology with respect to process Industries, Characteristic method employed in
 Certain Energy Intensive Industries

Module-3

Environment: Introduction, Multidisciplinary nature of environmental studies- Definition, scope and importance, Need for public awareness.
 Ecosystem: Concept, Energy flow, Structure and function of an ecosystem. Food chains, food webs and ecological pyramids, Forest ecosystem, Grassland ecosystem, Desert ecosystem and Aquatic ecosystems, Ecological succession.

Module-4

Environmental Pollution: Definition, Cause, effects and control measures of - Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards, Solid waste Management, Disaster management Role of an individual in prevention of pollution, Pollution case studies.

Module-5

Social Issues and the Environment: Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case Studies. Wasteland reclamation, Consumerism and waste products, Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Issues involved in enforcement of environmental legislation.

Group assignments:

Assignments related to e-waste management; Municipal solid waste management; Air pollution control systems; Water treatment systems; Wastewater treatment plants; Solar heating systems; Solar power plants; Thermal power plants; Hydroelectric power plants; Biofuels; Environmental status assessments; Energy status assessments etc.

Course Outcomes: At the end of the course, the student will be able to:



K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BENGALURU-560109
DEPARTMENT OF MECHANICAL ENGINEERING

Open Elective List of 7th semester for AY 2022-23

18/7/2022

As per the circular date 15/07/2022 regarding the selection of the open elective from the 6th semester students for AY 2022-23 odd semester. Here by listed the details of the open electives opted by Mechanical engineering students.

Sl. No.	Name of the Student	USN	18CV753	18CS752	18EC751	Signature of Student
1	A BHANU VENKAT	1KG19ME001	YES		-	A. Bhanu Venkat
2	AMITH A S	1KG19ME002		YES	-	Amith A S
3	BHARGAVI B REDDY	1KG19ME003		YES	-	Bhargavi B Reddy
4	BOLLINENI PRUTHVI RAJ	1KG19ME004	YES		-	B. Pruthvi Raj
5	CHETHAN K	1KG19ME005		YES	-	Chethan K
6	GAGAN G R	1KG19ME006		YES	-	Gagan G R
7	GANGA REDDY D M	1KG19ME007		YES	-	Ganges
8	HARISH K	1KG19ME008		YES	-	Harish K
9	LOKESH A B	1KG19ME011		YES	-	Lokesh A B
10	MALAPATI RAVI TEJA	1KG19ME012	YES		-	M. Ravi Teja
11	MANU P B	1KG19ME013	YES		-	Manu P B
12	MOKSHA VARDHAN M J	1KG19ME014		YES	-	Moksha
13	PRADEEP A	1KG19ME016		YES	-	Pradeep A
14	RAJALAKSHMI VEERESH	1KG19ME017		YES	-	Rajalakshmi
15	SHRAVAN N P	1KG19ME018		YES	-	Shravan N P
16	SUNITH G	1KG19ME019		YES	-	Sunith G
17	VENKAT RAGHAVEN V S	1KG19ME020		YES	-	Venkat V S
18	AKSHAY KUMAR ARADHYA K	1KG20ME400	YES		-	Akshay K
19	CHETHAN A N	1KG20ME401	YES		-	Chethan A N
20	JAGADISH N	1KG20ME402	YES		-	Jagadish N
21	KARTHIK C	1KG20ME403	YES		-	Karthik C
22	MOHIK B	1KG20ME404	YES		-	Mohik B
23	RAGHAVENDRA K J	1KG20ME405	YES		-	Ragavendra K J

24	RAKSHITH R	1KG20ME406		YES		Rakshith R
25	SANTHOSH N	1KG20ME407	YES			Santhosh N
26	SHREE THILAK K V	1KG20ME408	YES			Shree Thilak
27	REDDY PRAKASH	1KG20ME409	YES			Prakash R

Signature of Head of Department *Prakash R* 20/7/22

Department Of Mechanical Engineering
K.S. Group Of Institutions
K.S. School Of Engineering & Management
Bangalore-560 109