Government College of Engineering, Karad

(An Autonomous Institute of Government of Maharashtra) **Academic Unit**

GUIDELINES FOR CURRICULUM UNDER AUTONOMY

Following guidelines shall be strictly followed while designing the curriculum under Autonomy.

Contact hours and credits for each semester

Semester	Contact Hours	Credits				
I & II	30	48(24+24)				
III & IV	30	48(24+24)				
V & VI	28	50(25+25)				
VII & VIII	26	52(26+26)				
Total C	198(99+99)					

1 credit for 1 lecture / tutorial hour and 1 credit for 2 practical hours per week.

- ➤ Theory & practical should be separated and made as Theory course & laboratory or Lab course separately.
- ➤ There will be max. 5 theory courses and max. 5 Laboratory courses per semester. Total courses (passing heads) in a semester should not be more than 10.
- Number of practical batches for each class should be as under-

Class	No. of Practical batches
1 st Year Class	3
2 nd , 3 rd & 4 th Year Class	4

- Laboratory courses (excluding seminar & other presentations) should essentially be in lab where performance is conducted. Exceptionally demonstration may also be considered for lab course. For theoretical subjects, such performance can be evaluated through assignments and quiz.
- ➤ Heads are requested not to keep lab courses for which lab is not available and the department is not likely to purchase required equipment in next three years. That can be considered only after procurement of equipment and establishment of lab. Same strategy should be applied for the list of experiments to be included in the syllabus in a particular lab.
- ➤ ESE for lab courses (excluding seminars & projects) should be kept only when performance based practical examination is possible. Under the circumstances, students should essentially be assessed based only on his practical performance during the examination. There could
- ➤ In view of AICTE guidelines, observations in different reports by NKC, NASSCOM, NSDM, FICCI etc., the curriculum shall consist of courses like Environmental Studies, Professional Practises (I Communication skills, II Soft skills, III Aptitude skills), industrial training, Mini Project, Minor Project, Project, Electives, self study etc. In view of giving industry exposure, more thrust shall be given on expert lectures from industry, industrial visits, industry problem based/sponsored projects, real life problem based mini projects etc.

- ➤ All lab courses including seminar & projects (excluding mini project) shall be assessed continuously based on continuous evaluation formats.
- At least one industrial visit in one of the appropriate laboratory courses in each of IV, V, VI, VII and VIII semester; it should be mentioned in the details of that course. It is mandatory; however, the department shall encourage more visits, if possible, in many courses at any level. The visit report should be included in the list of experiments and should be a part of journal/term work to be submitted by students. Due weightage shall be given in CE & ESE of that lab course.
- The credits and the level at which few common courses shall be offered are given below: .

Course	Semester/ Level	Contact Hours	Credits	Remarks		
General Proficiency-I	I/ II	2(L)+2(P)	3			
Environmental Studies	III	3		Audit Course		
General Proficiency-II	III/ IV	2(L)+2(P)	3			
General Proficiency-III	V/VI	2(L)+2(P)	3			
Open Elective	VI	2(L) + 2(P)	3	Course		
				offered by		
				other than		
				parent dept.		
Each department shall offe	er at least one open	elective to be offer	ed to the			
students of other departme	ent. Hence contents	should be prelimin	ary.			
Industrial Training/ Mini	During vacation		2	Mini project		
Project (Batch size 2	After TE and			essentially		
students)	credits in VII			based on		
				industry or		
				real life		
				problem		
Minor Project	V/VI	2	2	At the most 2		
				students can		
				do one minor		
				project(Batch		
				of 10		
				students per		
				faculty)		
Seminar	VII	1	1			
Elective-I	VII					
Project Phase-I	VII	2	4	At the most 5		
Project Phase-II	VIII	5	8	students can		
				do one major		
				project (2		
				project		
				batches per		
				faculty)		
Elective-II & III	VIII					

➤ The curriculum structure should essentially contain list of electives in concerned semester. The list though contain at least three courses, should not be too exhaustive.

- ➤ The curriculum structure & syllabus should be in the formats only.
- In order to enhance the self learning ability of the student, the self study modules needs to be separately specified in the contents of the syllabus for the subject. The student's ability to express his/her own thoughts will be tested by asking questions on self study modules in ESE
- > Text books, reference books, websites etc should be correctly mentioned with latest version. The Heads are requested to verify it personally on net at the time of mentioning in the curriculum.
- ➤ The courses for UG and PG need to be formulated with its Course Objectives, course outcomes, assessment rubrics, mapping of course objectives with programme outcomes etc.
- In the structure all theory courses should appear first followed by laboratory courses.

Chairman BOS MCA is requested to discuss the final structure with Dean Academics. Notes:

Please see following annexure for first year UG structure (Common to all branches) Chairman BOS MCA is requested to discuss the final structure with Dean Academics.

Government College of Engineering, Karad

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B. Tech. First year Curriculum Structure

Semester - I

Sr.	Course	Course	Course Title	L	T	P	Contact	Credits	EXAM SCHEME		HEME		
No.	Category	Code					Hrs/Wk		CT1	CT2	TA/CA	ESE	TOTAL
1	BS	FE101	Engineering Mathematics – I	3	1	-	4	4	15	15	10	60	100
2	BS	FE102	Engineering Physics	4	-	-	4	4	15	15	10	60	100
3	ES	FE103	Basic Electronics and Computer	4	-	-	4	4	15	15	10	60	100
			Programming										
4	ES	FE104	Engineering Graphics	3	-	-	3	3	15	15	10	60	100
5	ES	FE105	Basic Civil Engineering	3	-	-	3	3	15	15	10	60	100
6	BS	FE106	Engineering Physics Lab	-	-	2	2	1	-	-	50	-	50
7	ES	FE107	Computer Programming Lab	-	-	2	2	1	-	-	50	-	50
8	ES	FE108	Engineering Graphics Lab	-	-	4	4	2	-	-	100	-	100
9	ES	FE109	Basic Civil Engineering Lab	ı	-	2	2	1	-	-	50	1	50
10	ES	FE110	Workshop Practice - I	ı	-	2	2	1	-	-	50	1	50
			Total	17	1	12	30	24	75	75	350	300	800

L- Lecture T-Tu

T-Tutorial

P-Practical

CT1- Class Test 1

TA/CA- Teacher Assessment for theory courses / Continuous Assessment for lab

courses

CT2- Class Test 2

ESE- End Semester Examination (For Laboratory End Semester performance)

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B. Tech. First year Curriculum Structure

Semester - II

Sr.	Course	Course	Course Title	L	T	P	Contact	Credits	EXAM SCHEME				
No.	Category	Code					Hrs/Wk		CT1	CT2	TA/CA	ESE	TOTAL
1	BS	FE201	Engineering Maths – II	3	1	-	4	4	15	15	10	60	100
2	BS	FE202	Engineering Chemistry	3	-	-	3	3	15	15	10	60	100
3	ES	FE203	Basic Mechanical Engineering	3	-	-	3	3	15	15	10	60	100
4	ES	FE204	Basic Electrical Engineering	3	-	-	3	3	15	15	10	60	100
5	ES	FE205	Engineering Mechanics	3	-	-	3	3	15	15	10	60	100
6	BS	FE206	Engineering Chemistry Lab	-	-	2	2	1	-	ı	50	-	50
7	ES	FE207	Basic Mechanical Engineering	-	-	2	2	1	-	1	50	-	50
			Lab										
8	ES	FE208	Basic Electrical Engineering	-	-	2	2	1	-	1	50	-	50
			Lab										
9	ES	FE209	Engineering Mechanics Lab	-	-	2	2	1	-	ı	50	-	50
10	HS	FE210	General Proficiency - I	2	-	2	3	3	-	-	50	-	50
11	ES	FE211	Workshop Practice - II	-	-	2	2	1	-	-	50	-	50
			Total	17	01	12	30	24	75	75	350	300	800

L- Lecture T-Tutorial P-Practical

CT1- Class Test 1 TA/CA- Teacher Assessment for theory courses / Continuous Assessment for lab

courses

CT2- Class Test 2 ESE- End Semester Examination (For Laboratory End Semester performance)