Balochistan University of Engineering and Technology Khuzdar

REGULATIONS FOR SEMESTER SYSTEM IN BUET KHUZDAR

applicable from the academic session 2012

ALOCHISTAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY KHUZDAR

REGULATIONS FOR SEMESTER SYSTEM IN BUET KHUZDAR

Statutes /Regulations regarding the scheme and courses of studies , manner and method of teaching for the degree of Bachelor of Engineering in Civil Engineering, Electrical Engineering, Mechanical Engineering and Computer System Engineering as provided under Section 45(1) k and (4)(d) of BUET act 1994.

1 STATUTES

1.1 Title

These statutes /Regulations may be called the Balochistan University of Engineering and Technology, Semester system Scheme of studies Manner & Method of Teaching etc., for the degree of Bachelor of Engineering statutes/Regulations, 2011.

1.2 Applicability:

These statutes /Regulations shall be applicable to the firs year University students from the Academic year 2012.

1.3 Definitions:

a) "Academic Year" means the period of programme covering two semesters.

b) "Board of studies" means the Board of studies of the University.

c) "Credit Course" means a course of study, the successful completion of which shall be a requirement of obtaining the Bachelor of Engineering Degree.

d) "Credit Hours" means the rating allotted to each course during a semester. One lecture hour per week is equal to one credit hour. One lab work session of 2 hours per week is also equal to one credit hour. If a course is taught for four lectures and two lab work sessions of 2 hours per week shall be of six credit hours.

e) "Cumulative Grade point Average" means the grade point average of a student at the end of each semester after second semester considering the grades obtained in all the courses or at the end of the entire period of study.

   For example in 170 credit hours course of study for the B.E. degree if a student has obtained a total of 540 Quality points then his cumulative grade point average (CGPA) will be equal to 540/170=3.176.

f) "Grade point average" means the average value of all grade points earned by a student. Grade point Average (GPA) is an expression for the performance of the student in the course he has taken during a particular semester. This is calculated

by adding the quality points of all the courses taken in a semester divided by the total number of credit hours.

g) "Quality points" means a product of grade point (GP) and credit hours (CH). For example if a student obtain as B grade in a course of 4 credit hours then his quality point (QP) will be calculated as follows QP=GP ×CH=3×4=12

h) "Non-Credit course" means a course of study, the successful completion of which shall not be a requirement for the Bachelor of Engineering degree.

i) "Semester" means a period of teaching and examination of 22 weeks including all gazetted holidays.

j) "University" means Balochistan University of Engineering and Technology Khuzdar.

k) "Vice Chancellor" "Dean", "Chairman", "Controller" means respectively the Vice Chancellor of the University, the Dean of faculty of engineering, the Chairman of respective department and the Controller of Examination.

1.4 General Scheme of Studies

a) The courses of study leading to the B.E. degree are devoted to courses appropriate to the degree in Civil Engineering, Electrical Engineering, Mechanical Engineering and Computer System Engineering.

b) Practical/viva voce examinations shall be held along with the theory examinations by the University where practical work forms part of the curriculum.

c) The medium of instruction and examinations shall be English for all subjects.

1.5 Duration of courses

a) The courses of study leading to the degree of Bachelor of Engineering shall be of four years (8 semesters) duration. There shall be two semesters in an Academic year. The duration of each semester shall be 22 weeks, (16 weeks of actual teaching time, 1 week for midterm examinations, one week for preparation leave) and 4 weeks for conduct of examination. A vacation of 4 weeks shall be allowed at the end of each semester. Provided that a student registered for Bachelor of Engineering degree programme must successfully complete his/her course requirements in maximum period of 6 years otherwise his name will be removed from the rolls of the university.

b) The semester starting with the commencement of an Academic year shall be called the first semester and the next semester shall be called the second semester and so on till the last semester of the Bachelor of Engineering degree programme which shall be called the Eighth semester.

1.6 Number of subjects and papers for examination :

The courses of study which a student shall be required to pass for earning the Bachelor of Engineering Degree in Various disciplines shall be as follows.

a) Civil Engineering

b) Electrical Engineering

c) Mechanical Engineering

d) Computer System Engineering.

2 Regulations

2.1 Admissions:

a) The number of seats available for admission in the 1st semester for each Academic year/session and other requirements regarding eligibility of candidates for admission shall be such as announced by the University through the PROSPECTUS and other University Notifications issued from time to time.

b) Unless otherwise provided in the relevant prospectus, admission shall be made strictly on the basis of academic record and admission test to be conducted by the University.

2.2 Admission by Migration

Under extraordinary circumstances the Vice Chancellor, on the recommendation of the Dean concerned may allow migration of a student and vice versa provided that:

a) The institutions concerned agree for the migration of the student.

b) The course of studies are equivalent.

c) The credits earned in the previous institution may be permitted to be transferred to the other institution to which the student migrates.

2.3 Change of Technology/Discipline

No student shall be allowed to change the Technology/ Discipline once allotted by the selection committee.

2.4 Course of studies:

a) The details of courses of studies with credit hours per semester for each Discipline of Engineering shall be such as may be prescribed in the prospectus 2011 of the university.

b) The bachelor for engineering programme in each discipline shall have a number of prescribed courses and each course shall be allocated a number of credit Hours as given in the curriculum of each discipline.

c) The candidate is required to clear all semester courses for the Bachelor of engineering degree programme and the maximum credit load allowed to be taken by a student in a semester shall be 32 hours.

2.5 Manner and Method of Teaching And Examinations/Tests

2.5.1 Teaching:

Ordinarily the teaching shall be through lectures, tutorials/ assignments, periodic tests/examinations and laboratory practicals. The courses shall be numbered according to a scheme. The course numbers once fixed shall not be changed even if the course has been abolished.

2.5.2 Examinations /Test

Evaluation of the candidates shall be based on periodic Tests/Examinations/Viva Voce

2.5.3 Grades:

Grades given to a student in each course shall be of two types:

(i) Numerical Grades:

Assessment of performance on the basis of marks (out of 100) fixed for a course of any credit Hours Unit, shall be termed Numerical grade (NG).

(ii) Alphabetical Grades:

Equivalent of numerical grade in terms of alphabets shall be termed as Alphabetical Grade (AG). Each letter carries a value in terms of numerical points of Grade point (GP).

2.6 Grading System:

a) Grade points should be as follows:

A for 4, **A-** for 3.7, **B+** for 3.4, **B** for 3, **C+** for 2.5, **C** for 2, **D** for 1 and **F** for 0 or fail and **I** for incomplete.
Maximum Grade Point
Average = 4.00
Please Note: Each course Title consists of theory and Practical, as given in the Courses of studies

b) Equivalence between letter grading and numerical grading shall be as follows:

Grade	Marks (%)	GP	Value Remarks
A	90-100	4.0	Excellent
A-	85-89	3.7	Very Good
B+	80-84	3.4	Good
B	70-79	3.0	Above average
C+	60-69	2.5	Average
C	50-59	2.0	Satisfactory
D	40-49	1.0	Pass
F	Below 40	0.0	Fail
I			Incomplete

2.7 Grade Point Average:

The academic rating of a student shall be calculated on the basis of the Grade Point Average. The Grade Points obtained by a student in each course shall be multiplied by the number of credit hours specified for that course and then the Grade Point Average (GPA) shall be calculated. An example of the calculations of the GPA is given at the end

2.8 Cumulative Grade Point Average:

a) The Cumulative Grade Point Average (CGPA) shall be calculated at the end of the second semester and each of the subsequent semesters as explained at the end.

b) If a student fails to secure a minimum CGPA of 2.00 at the end of the 8th semester he/she will be given one additional chance to pass a course in which he/she has failed or absented, when it is offered for the examination.

c) If a student is unable to pass a course or courses in the additional chance given, he/she will stand automatically removed from the rolls of the university.

d) A student will be given one additional chance to improve his/her CGPA by repeating a course or reappearing in the examination of a course he/she has obtained Grade C or lower, when the course is offered for examination.

e) If a student fails to make up the deficiency in his/her Cumulative Grade Point Average in the number of chances permitted, he/she will cease to be on the rolls of the university.

2.9 Examinations

Types and number of Examinations

a) There shall be four types of examinations for each course during each Semester. These Examinations shall be termed.

   i. Tutorial/Assignment,

   ii. Mid-term test,

   iii. Practical Examination/Lab.

   iv. Semester Examination

b) The nature of examinations shall be determined by the teacher concerned who will be responsible for the final evaluation. The grade given in the course by the teacher/examiner shall be final.

2.9.1 Tutorial/Assignment:

a) At least two Tutorials/Assignments shall be given in each course during a semester. The first Tutorial/assignment will be given, collected and assessed within 2nd & 4th week and the Second Tutorial/Assignment will be given, collected and assessed within 12th and 14th week of the commencement of the semester and the result finalized after inviting objections one week before the termination of the courses.

b) If student fails to submit a Tutorial/Assignment on the due date, on account of any genuine reason, the teacher concerned may allow him/her to submit the same within the next one week. Tutorials/Assignments will not be accepted for evaluation after one week of the due date.

2.9.2 Mid-Term test:

a) There shall be a Mid-term Test in a course during a semester, which will be held during the 10th week after the commencement of the Semester.

b) The duration of the Midterm Test shall not be more than an hour.

c) The conduct (fixing of time, date and place) of Mid-term Test shall be the responsibility of the Chairman of the concerned department.

d) If a student could not appear at Midterm Test for genuine reasons he/she may apply in writing to Chairman of the department concerned, as early as possible but not later than one week from the date of holding the Mid-term Test in lieu of Mid-term Test ,for permission to appear at a Special Test in lieu of Midterm Test held.

e) There shall be no separate make–up test for failures or repeat test for absentees on any account, except as provided in (d) above.

f) The scripts of Mid-term Tests will be shown to the students after evaluation/marking. The award lists/marks sheets of the tests will be displayed on the Notice board of the Department immediately after evaluation. A copy of the award lists of these tests will also be submitted by the teacher/examiner to the Chairman of the department concerned.

g) If any student is not satisfied with the evaluation of the Mid-term Test, he/she may represent to the chairman of the concerned Department within 7 days of the declaration of the result. The decision of the Chairman after consulting the examiner concerned in the matter shall be final. Any representation after the expiry of 7 days will not be entertained. The final award list of Mid-term Tests along with the mark of Tutorial/Assignment tests will be forwarded by the teachers concerned to the controller of Examinations before the commencement of the Final Semester Examination. The Marks so communicated to the Controller of Examinations shall be final and no subsequent change shall be permitted.

2.9.3 Practical Examination/Lab. Examination

The Practical/Lab. Examination may include:

i. Journals, Reports- Evaluation.

ii. Practical, Viva-Voce Examination.

2.9.4 Semester Examination:

a) The Examination in all the courses will be conducted by the Controller of Examinations.

b) The Examination shall be open to a student who has been on the rolls of the University prior to his/her examination from is duly certified and forwarded by the Chairman of the Department.

c) The duration of Examination in all the courses (irrespective of the number of credit hours) shall not be more than three hours.

d) The Examination shall be held at the end of each semester. Two weeks preparation leave will be allowed to the students after the completion of 16 weeks teaching period and before the commencement of Semester Examination.

e) The Examination schedule / Programme shall be prepared by the Controller of examinations in consultation with the Chairman of the department concerned and approved by the Vice Chancellor on the recommendation of the Dean of the faculty of engineering.

f) The examination schedule / programme shall be notified by the Controller of examinations at least one week in advance of the commencement of the examination.

g) The Controller of Examination shall be responsible for compilation/tabulation of the results and for submitting it to the examination committee/Vice Chancellor for approval before its announcement.

h) The Controller of examination shall issue Marks / Grade certificate to each individual student appearing at the examination on the prescribe form within two weeks from the date of declaration of the results.

2.9.5 Distribution of Marks for each Course:

The distribution of marks (weightage of grade) in semester will be as follows:

For courses where laboratory Practicals are involved:

(a)	Tutorial Assignment	10 Marks
(b)	Midterm Test	10 Marks
(c)	Practical/Lab. Examination	20 Marks
(d)	Semester Examination	60 Marks
	Total:	100 Marks

For courses where laboratory Practicals are not involved:

(a)	Tutorial Assignment	10 Marks
(b)	Midterm Test	10 Marks
(c)	Semester Examination	80 Marks
	Total:	100 Marks

2.9.6 Condition of Passing the Course and a Semester:

a) In order to pass a course a candidate besides obtaining 40% marks in the course (Tutorial+Midterm+Practical/Lab work+Theory) must obtain at least 40% marks in theory paper and 40% marks in Tutorial,Midterm, Practical/Lab works.

b) In order to pass a Semester examination besides obtaining 40% marks in a course as mentioned in 2.9.6(a), 50% marks must be obtained in aggregate in each Semester Examination.

2.10 Class attendance:

a) At the end of each Semester the Teacher concerned shall send to the Dean, through the Chairman of Department concerned, a statement giving the total number of lectures delivered and practicals conducted by him together with the total number of lectures and practicals attended by each student in his charge.

b) A candidate with less than 80% attendance in Class lectures and lab work will not allowed to take the Semester Examination in a course. For genuine reasons the Dean of the faculty of Engineering may condone 5% shortage in attendance on the recommendations of the Chairman of the Department. In exceptional cases the Vice Chancellor may further condone 5% shortage in attendance on the recommendations of the Dean. For very genuine reasons supported by very valid grounds he may consider some condonation as may be decided by the competen authority.

c) In the case of a sportsperson participating in games of National or International level, as verified by the Registrar/Director sports and recommended by Chairman concerned, 80% of the attendance in class lectures and lab. work will be calculated on the basis of total number of lectures delivered/practicals conducted in a course minus the number of total lecture days actually spent by the sportsperson in representing the university in sports or games.

d) In the case of persons who are selected by the government or the university for proceeding on good-will missions outside the Province/Country, the lectures delivered in the concerned classes during the period of absence of such persons not exceeding one month shall be deducted from the total number of lectures delivered to the class and the required percentage of attendance for purpose of examinations shall be based on the balance of lectures.

2.11 Promotion to Higher Class:

Candidate failing in different course(s) in a particular Semester will be allowed to proceed to the next Semester provisionally on the following basis.

a) Candidates will be promoted upto 4th Semester provided that they have appeared in the Semester Examinations of 1st, 2nd and 3rd Semesters.

b) No candidates will be promoted to 5th Semester unless he/she has passed 1st and 2nd Semester Examinations and has appeared in 4th Semester's Examinations.

c) No candidates will be promoted to 6th Semester unless he/she has passed 1st, 2nd and 3rd Semester Examinations and has appeared in the 5th semester Examination.

d) No candidate will be promoted to 7th Semester unless he/she has passed 1st ,2nd , 3rd and 4th Semester Examinations and has appeared in 6th Semester Examination.

e) No candidate will be promoted to 8th Semester unless he/she has passed 1st , 2nd, 3rd ,4th and 5th Semester Examinations and has appeared in 7th Semester Examination.

f) A candidate will be allowed to repeat the examination in the course in which he/she has failed or has obtained GPA of less than 2.00. The maximum period available to him/her vide Statutes 1.5 (a) after which period he/she shall stand automatically dropped from the rolls of the university, unless the Vice Chancellor on the recommendation of Academic Council allows any relaxation as a special case.

2.12 Repeating of Courses:

a) A student will be allowed to repeat in the following manner, a course in which he/she was absent or has failed whenever the course is offered.

i. Candidate who appeared in Tutorial, Midterm, Lab and Semester Examinations but could not secure passing marks, i.e., 40 out of 100 shall be required to reappear in the **Semester Examination** in order to secure passing percentage which is 40%. The marks secured by him/her in **Tutorial or Mid-term Examination** previously shall be carried forward.

ii. Candidate who had appeared in Tutorial and Mid-term Examinations but remain absent in Semester Examination and could not secure 40% marks shall be governed by(i) above.

iii. Candidate who did not appear in Tutorial and Mid-term Examination but appeared in Semester Examination and could not secure passing marks i.e., 40% shall be required to repeat Tutorial/mid-term test. His/Her marks shall be carried forward.

iv. Candidate who remained absent in Tutorial/Mid-term/Lab and Semester Examination in a subject shall be required to repeat Tutorial, Mid-term, Lab and Semester Examinations in the subject in which he/she did not appear.

v. Candidate who remained absent through out and did not take the examination shall be required to appear in all the subjects by readmission.

Note:

1. In all the above cases the candidates are given choice to appear in the semester examination only without repeating Mid-term/Tutorial report .etc. where necessary if they are confident that they can secure pass marks by appearing in the semester Examination. They will do so at their own risk.

2. For the purposes of repeating the courses, the distribution of marks will be the same as for the semester Examination in which the candidate appeared or was required to appear for he first time.
3. If a candidate wants to appear in semester Examination only he/she will pay the Examination fee of Rs. 500/= for repeating each semester.
4. If a candidate wants to appear in Tutorial or Mid-tem test he/she will have to get himself/herself registered for the course in which he/she has failed and he/she will pay same fee as given in (3) above.

b) A student, who does not attain the required CGPA for promotion to the higher semester class or to attain a CGPA of 2.00 at the end of Eighth semester to qualify for the award of Bachelor of Engineering degree, may be allowed to repeat courses in which the Grade is C or lower whenever the courses are offered. In case of such repetitions, the previous Grades in the courses concerned shall stand cancelled.

c) Permission for repeating a course will be given by the Dean on the recommendation of the Chairman concerned.

2.13 Award of Bachelor of Engineering Degree

The minimum requirements for the award of Bachelor of Engineering Degree in Civil, Electrical Mechanical and Computer System Engineering shall be as follows.

a) Must have passed all semester examinations as laid down in 2.9.(6)

b) Must have obtained at least 2 G.P.A in each semester.

c) Must have obtained at least 2C.G.P.A at the end of 8th semester.

d) A Candidate who has fulfilled/ undergone/ completed all the requirements as specified in these Regulations and passed all the semester Examinations from 1st to 8th shall be eligible for award of degree in the Technologies as given above and cumulative grade will be awarded on the basis of all the Eight semesters which must be at lease 2.00. Division also will be based on all the 8th semester on the following percentage;

First Division -60% or above

Second Division -50% or above

Provided that the students granted exemption in subject or subjects on migration from any other University during 7th and 8th Semester Examination shall not be awarded any Class/Division. Such students shall be awarded only pass Class.

2.14 Interpretation:

In case a question of interpretation of any of these rules arises, the Chairman of the Department concerned will write to the Dean giving his own views. The Dean may form a committee to look into the matter and to take decision accordingly.

If the effected party is not satisfied by the decision of the Committee, he/she will have the right to appeal to the Vice Chancellor who may either decide the matter at his discretion or, if he deems it necessary, may place the matter before the Academic Council. The decision of the Vice Chancellor/Academic Council shall be final.

2.15 Amendments/Alterations/Additions:

These Statutes/Regulations can be amended/altered by the Academic Council and whenever the need be, new Statutes/Regulations can also be added.

Method of Calculating Grade point Average (GPA)

Grade points obtained in each course are multiplied by the number of Credit Hours specified for that course and then the sum of the quality Points is divided by the total credit Hours to obtain the Grade point Average (GPA). For example, the result of a First Semester (Electronic Engineering) student may be as follows:

S.#.	Course No.	Course Title	Credit hours	Grade	Quality points
1	IS 101	Islamic Studies/Ethics	2	B	2 x 3 =6
2	HS 105	Functional English	3	C+	3x2.5 =7.5
3	ME 112	Engineering Statics	3	A	3x4 =12
4	GS 101	Calculus and Analytical Geometry	3	C	3x2=6
5	EE 101	Electrical Engineering	3	B+	3x3.4=10.2
6	ME 101	Computer System and Prog.	3	B	3x3=12
		Total	17		53.7
		GPA=3.15			

Method of Calculating Cumulative Grade point average (CGPA)

The Cumulative Grade point Average (CGPA) is obtained by adding all the Quality points of the courses offered in various Semesters and dividing the total number or credit Hours prescribed for the Semesters concerned. For example, the CGPA of a student of fifth semester (Mechanical Engineering)may be as follows:

Semester	Credit Hours	Total of Quality points
I	21	67.2
II	20	66
III	21	70.35
IV	19	64.5
V	20	52.0
Total	101	320.05

CGPA=3.17

B.E PROGRAMME IN MECHANICAL ENGINEERING

Note: *A sample for distribution of courses in different semesters for B.E Mechanical as per suggestions of HEC is provided, however the departments may include their course distribution according to their requirements*

Duration:	4 years
Number of Semesters	8
Number of weeks per semester:	18 (16 for teaching and 2 for examinations)
Total number of credit hours:	130-136
Engineering Course (Minimum)	70 per cent
Non-Engineering Course (Maximum)	30 per cent

Non-Engineering Domain

Knowledge Area	Subject Area	Name of Course	Lec CH	Lab CH	CR	Total Courses	Total Credits	% Area	% overall
Humanities	English	English-I	3	0	3	3	8	20	5.88
		English-II	2	0	2				
		English-III	3	0	3				
	Culture	Pakistan Studies	2	0	2	2	4	10	2.94
		Islamic Studies/Ethics	2	0	2				
	Social Sciences	Social Science	2	0	2	1	2	5	1.47
Management sciences		Management Elective-1	3	0	3	2	5	12.5	3.68
		Engineering Management & Economics	2	0	2				
Natural Sciences	Physics	Physics	2	1	3	1	3	7.5	2.21
	Mathematics	Mathematics-1	3	0	3	4	12	30	8.82
		Mathematics-2	3	0	3				
		Mathematics-3	3	0	3				
		Mathematics-4	3	0	3				
	Electives	Chemistry	2	1	3	2	6	15	4.41
		Mathematics-5	3	0	3				
TOTAL						**15**	**40**	**100**	**29.41**

Engineering Domain									
Knowledge Area	**Subject Area**	**Name of Course**	**Lec CH**	**Lab CH**	**CR**	**Total Courses**	**Total Credits**	**% Area**	**% overall**
Computing	Funda Mentals	Computers Systems and Programming	2	1	3	1	2	2.08	1.47
Engineering Foundation		Engineering Drawing and Graphics	2	1	3	11	35	36.46	25.74
		Engineering Statics	3	0	3				
		Engineering Dynamics	3	1	4				
		Mechanics of Materials-I	3	0	3				
		Thermodynamics-I	3	0	3				
		Workshop Practice	0	2	2				
		Mechanics of Machines	3	0	3				
		Fluid Mechanics-I	3	0	3				
		Manufacturing Processes	3	1	4				
		Measurement & Instrumentation	2	1	3				
		Engineering Materials	3	1	4				
Major Based Core (Breadth)		Machine Design & CAD-1	2	1	3	7	26	27.08	19.12
		Machine Design & CAD-2	3	1	4				
		Fluid Mechanics-II	3	1	4				
		Heat and Mass Transfer	3	1	4				
		Control Engineering	2	1	3				
		Thermodynamics-II	3	1	4				
		Mechanics of Materials-II	3	1	4				
Major Based Core (Depth)		Internal Combustion Engines	3	1	4	6	21	21.88	15.44
		Mechanical Vibrations	3	1	4				
		Refrigeration & Air Conditioning	3	1	4				
		Technical Elective-I	3	0	3				
		Technical Elective-II	3	0	3				
		Technical Elective-III	3	0	3				
Inter-disciplinary Engineering Breadth (Electives)		Electrical Engineering	2	1	3	2	6	6.25	4.41
		Electronics	2	1	3				
Senior Design Project		Project	0	3	3	2	6	6.25	4.41
		Project	0	3	3				
Industrial Training			0	0	0	0	0	0	0
TOTAL						**29**	**96**	**100**	**70.59**
Grand Total						**44**	**136**		**100**

BE (Mechanical Engineering)
Sample Scheme of Studies

Note: *A sample for distribution of courses in different semesters for B.E Mechanical is provided, however the departments may include their course distribution according to their requirements*

Semester 1

	Subjects		Credit Hrs		Credit Hours
			Theory	**Lab**	
1	IS-102	Pakistan Studies	2	0	2
2	GS-101	Calculus & Analytical Geometry	3	0	3
3	HS-101	Functional English	3	0	3
4	ME-101	Computer System & Programming	2	1	3
5	ME-111	Engineering Drawing & Graphics	2	1	3
6	ME-113	Workshop Practice	0	2	2
		Total:	**12**	**4**	**16**

Semester 2

	Subjects		Credit Hrs		Credit Hours
			Theory	**Lab**	
1	IS-101	Islamic Studies/Ethics	2	0	2
2	EE-101	Electrical Engineering	2	1	3
3	GS-102	Ordinary Differential Equation	3	0	3
4	HS-102	Communication Skills	2	0	2
5	ME-112	Engineering Statics	3	0	3
6	ME-121	Thermodynamics-I	3	0	3
		Total:	**15**	**1**	**16**

Semester/Term 3

	Subjects		Credit Hrs		Credit Hours
			Theory	**Lab**	
1	ME-211	Engineering Dynamics	3	1	4
2	ME-212	Mechanics of Materials–I	3	0	3
3	ME-213	Engineering Materials	3	1	4
4	ME-221	Thermodynamics-II	2	1	3
5	ME-222	Fluid Mechanics-I	3	1	4
		Total:	**14**	**4**	**18**

Semester 4

	Subjects		Credit Hrs		Credit Hours
			Theory	**Lab**	
1	EE-201	*2.15.1.1.1 Electronics*	2	1	3
2	GS-202	Complex Variables & Transforms	***3***	0	3
3	ME-214	Machine Design & CAD-I	2	1	3
4	ME-215	Mechanics of Materials–II	3	1	4
5	ME-223	Fluid Mechanics-II	3	1	4
		Total:	**13**	**4**	**17**

Semester/Term 5

	Subjects		Credit Hrs		Credit Hours
			Theory	**Lab**	
1	HS-301	Technical Report Writing & Presentation Skills	3	0	3
2	GS-301	Numerical Analysis	3	0	3
3	ME-311	Machine Design & CAD-II	3	1	4
4	ME-312	Measurement & Instrumentation	2	1	3
5	ME-321	Heat & Mass Transfer	3	1	4
		Total:	**14**	**3**	**17**

Semester/Term 6

	Subjects		Credit Hrs		Credit Hours
			Theory	**Lab**	
1	GS-302	Applied Statistics	3	0	3
2	ME-313	Manufacturing Processes	3	1	
3	ME-314	*Control Engineering*	2	1	3
4	ME-315	*Mechanics of Machines*	3	0	3
5	ME-322	Refrigeration & Air Conditioning	3	1	4
		Total	**14**	**3**	**17**

Semester/Term 7

	Subjects		Credit Hrs		Credit Hours
			Theory	**Lab**	
1	MS-401	Engineering Economics	2	0	2
2	ME-411	*Mechanical Vibrations*	3	1	4
3	ME-421	Internal Combustion Engines	3	1	4
4	ME-4xy	Technical Elective-I	3	0	3
5	ME-499	Project	0	3	3
		Total:	**11**	**5**	**16**

3

4 Semester/Term 8

	Subjects		Credit Hrs		Credit Hours
			Theory	**Lab**	
1	ME-4xy	Technical Elective-II	3	0	3
2	ME-4xy	Technical Elective-III	3	0	3
3	MS-4xy	Management Elective	3	0	3
4	ME-499	Project	0	3	3
		Total:	**9**	**3**	**12**
		Grand Total:			

Course Code Legend

Alphabets

ME: Mechanical Engineering
EE: Electrical Engineering
GS: General Sciences
HS: Humanities/Social Sciences
MS: Management Sciences
IS : Islamic/Pak Studies

ELECTRICAL ENGINEERING DEPARTMENT

CURRICULUM SCHEME

FIRST SEMESTER

S. No.	Subjects	Codes	Marks		Credit-Hours	
			Theory	Practical	Theory	Practical
1	Introduction to Computing	CS-111	100	50	3	1
2	Linear Circuit Analysis	EE-112	100	50	3	1
3	Islamic Studies/Ethical	HS-113	50	-	2	-
4	Functional English	HS-114	100	-	2	-
5	Linear Algebra	MS-115	100	-	3	-
6	Electrical Workshop Practice	EE-116	-	50	-	2
			450	**150**	**13**	**04**
			600		**17**	

SECOND SEMESTER

S. No.	Subjects	Codes	Marks		Credit-Hours	
			Theory	Practical	Theory	Practical
1	Pak Studies	HS-121	50	-	2	-
2	Communication Skills	HS-122	50	-	2	-
3	Engineering Drawing	ME-123	-	50	-	1
4	Basic Mechanical Engineering	ME-124	100	-	3	-
5	Basic Civil Engineering	CE-125	100	50	3	1
6	Applied Calculus	MS-126	100	-	3	-
			500	**100**	**16**	**02**
			600		**18**	