

Mewar University



Mewar University

Knowledge to Wisdom

Additional information for 1.3.3

**Sample Scheme of Program having element of field
Projects/Research Projects/ Internship**

DEPARTMENT OF EDUCATION
(Faculty of Education)

SCHEME & SYLLABUS

(Session - 2019-20, 2020-21)

Course: B.Ed.

(Two Academic Years)



Mewar University
Knowledge to wisdom



MEWAR UNIVERSITY

N.H. 79, GANGRAR, CHITTORGARH

RAJASTHAN – 312901 (INDIA)

Aj
(Dr. Anur Dube)

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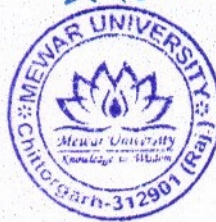
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7. THE CURRICULAR DETAILS FOR TWO YEARS ANNUAL DISTRIBUTION OF THE COURSES

B.Ed. I-Year

Course	Paper Code	Nomenclature	Scheme
Course 1	B.Ed. 101	Childhood and Growing up	100 Marks (80+20)
Course 2	B.Ed. 102	Contemporary India and Education (Including Gender, School and Society)	100 Marks (80+20)
Course 3	B.Ed. 103	Learning and Teaching	100 Marks (80+20)
Course 4	B.Ed. 104	Language across the curriculum (Including Reading and Reflecting on the texts)	100 Marks (80+20)
Course 5	B.Ed. 105-127	Pedagogy of School Subject (Including Understanding, discipline and Subject 1 st) Part I	100 Marks (80+20)
Course 6	B.Ed. 105-127	Pedagogy of School Subject (Including Understanding, discipline and Subject 2 nd) Part II	100 Marks (80+20)
Course 7	B.Ed. 128	Drama and Art in Education (Internal Assessment)	50 Marks
Course 8	B.Ed. 129	Critical Understanding of ICT (Internal and External Assessment)	100 Marks (50 Internal + 50 External)
Course 9	B.Ed. 130	Open Air Session SUPW Camp (Internal Assessment)	50 Marks
Course10	B.Ed. 131	School Internship Phase I (4 Weeks) Pre Practice, Practice Teaching, Engagement with the field: Task and assignment for course 5 and 6 (Internal Assessment)	200 Marks
Course11	B.Ed. 132	External Assessment (One Lesson of Pedagogy of a School Subject)	100 Marks
		Total	1100 Marks

B.Ed. II-Year

Course	Paper Code	Nomenclature	Scheme
Course12	B.Ed. 201-223	Pedagogy of School Subject (First)- Part I	50 Marks (40+10)
Course13	B.Ed. 201-223	Pedagogy of School Subject (Second) - Part II	50 Marks (40+10)
Course14	B.Ed. 224	Knowledge and Curriculum	100 Marks (80+20)
Course15	B.Ed. 225	Assessment for learning	100 Marks (80+20)
Course16	B.Ed. 226	Educational Management and Creating an Inclusive School	100 Marks (80+20)
Course17	B.Ed. 227	Understanding the Self (Internal Assessment)	50 Marks
Course18	B.Ed. 228	Optional Course * (Any one) 1. Vocational/Work education 2. Health and Physical Education	50 Marks (40+10)

		3. Peace Education 4. Guidance and Counseling 5. Innovations and Action Research	
Course19	B.Ed. 229	School Internship (Phase II, 16 Weeks) (Internal Assessment) Engagement with the Field, Task and Assignment for Course 12 & 13,	250 Marks
Course20	B.Ed. 230	External Assessment (Viva Voce along with power point presentation about the Teaching Subjects, Curricular and co- curricular activities in School during Internship)	150 Marks
TOTAL			900 Marks

**8. MU PAPER CODE (THE CURRICULAR DETAILS FOR TWO YEARS)
ANNUAL DISTRIBUTION OF THE COURSE (I-Year)**

Course	Paper Code	Nomenclature	Scheme
Course 1	B.Ed. 101	Childhood and Growing up	100 Marks (80+20)
Course 2	B.Ed. 102	Contemporary India and Education (Including Gender, School and Society)	100 Marks (80+20)
Course 3	B.Ed. 103	Learning and Teaching	100 Marks (80+20)
Course 4	B.Ed. 104	Language across the curriculum (Including Reading and Reflecting on the Texts)	100 Marks (80+20)
Course 5	B.Ed. 105-127	Pedagogy of School Subject (Including Understanding, Discipline and Subject 1 st) Part I	100 Marks (80+20)
Course 6	B.Ed. 105-127	Pedagogy of School Subject (Including Understanding, discipline and Subject 2 nd) Part I	100 Marks (80+20)
Course 5&6	B.Ed. 105	Pedagogy of Hindi	100 Marks (80+20)
	B.Ed. 106	Pedagogy of English	
	B.Ed. 107	Pedagogy of Sanskrit	
	B.Ed. 108	Pedagogy of Urdu	
	B.Ed. 109	Pedagogy of Rajasthani	
	B.Ed. 110	Pedagogy of Mathematics	
	B.Ed. 111	Pedagogy of General Science	
	B.Ed. 112	Pedagogy of Physics	
	B.Ed. 113	Pedagogy of Chemistry	
	B.Ed. 114	Pedagogy of Biology	
	B.Ed. 115	Pedagogy of Home Science	
	B.Ed. 116	Pedagogy of Computer Science	
	B.Ed. 117	Pedagogy of Social Science	
	B.Ed. 118	Pedagogy of Sociology	
B.Ed. 119	Pedagogy of Psychology		
B.Ed. 120	Pedagogy of History		
B.Ed. 121	Pedagogy of Political Science		
B.Ed. 122	Pedagogy of Economics		

	B.Ed. 123	Pedagogy of Geography	
	B.Ed. 124	Pedagogy of Art	
	B.Ed. 125	Pedagogy of Music	
	B.Ed. 126	Pedagogy of Business Studies	
	B.Ed. 127	Pedagogy of Financial Accounting	
Course 7	B.Ed. 128	Drama and Art in Education (Internal Assessment)	50 Marks
Course 8	B.Ed. 129	Critical Understanding of ICT (Internal and External Assessment)	100 Marks (50 Internal +50 External)
Course 9	B.Ed. 130	Open Air Session/SUPW Camp (Internal Assessment)	50 Marks
Course10	B.Ed. 131	School Internship Phase- I (4 Weeks) Internal Assessment (Pre Practice Teaching and Practice Teaching), Engagement with the Field: Task and Assignment for Course 5 &6	200 Marks
Course11	B.Ed. 132	External Assessment (One Lesson of Pedagogy of School Subject)	100 Marks
		Total	1100 Marks

II YEAR

Course	Paper Code	Nomenclature	Scheme
Course 12 & 13	B.Ed. 201-223	Pedagogy of School Subject (Including Understanding, discipline and Subject 1 st) Part II	50 Marks (40+10)
	B.Ed. 201-223	Pedagogy of School Subject (Including Understanding, discipline and Subject 2 nd) Part II	50 Marks (40+10)
Course12 &13	B.Ed. 201	Pedagogy of Hindi	
	B.Ed. 202	Pedagogy of English	
	B.Ed. 203	Pedagogy of Sanskrit	
	B.Ed. 204	Pedagogy of Urdu	
	B.Ed. 205	Pedagogy of Rajasthani	
	B.Ed. 206	Pedagogy of Mathematics	
	B.Ed. 207	Pedagogy of General Science	
	B.Ed. 208	Pedagogy of Physics	
	B.Ed. 209	Pedagogy of Chemistry	
	B.Ed. 210	Pedagogy of Biology	
	B.Ed. 211	Pedagogy of Home Science	
	B.Ed. 212	Pedagogy of Computer Science	
	B.Ed. 213	Pedagogy of Social Science	
	B.Ed. 214	Pedagogy of Sociology	
	B.Ed. 215	Pedagogy of Psychology	
B.Ed. 216	Pedagogy of History		
B.Ed. 217	Pedagogy of Political Science		



	B.Ed. 218	Pedagogy of Economics	
	B.Ed. 219	19 Pedagogy of Geography	
	B.Ed. 220	20 Pedagogy of Art	
	B.Ed. 221	21 Pedagogy of Music	
	B.Ed. 222	22 Pedagogy of Business Studies	
	B.Ed. 223	23 Pedagogy of Financial Accounting	
Course 14	B.Ed. 224	Knowledge and Curriculum	100 Marks (80+20)
Course 15	B.Ed. 225	Assessment for Learning	100 Marks (80+20)
Course 16	B.Ed. 226	Educational Management and Creating an Inclusive School	100 Marks (80+20)
Course 17	B.Ed. 227	Understanding the Self (Internal Assessment)	50 Marks
Course 18	B.Ed. 228	Optional Course * (Any one) 1. Vocational/Work education 2. Health and Physical Education 3. Peace Education 4. Guidance and Counseling 5. Innovation and Action Research	50 Marks (40+10)
Course 19	B.Ed. 229	School Internship (Phase II, 16 Weeks) (Internal Assessment) Engagement with the Field, Task and Assignment for Course 12&13	250 Marks
Course 20	B.Ed. 230	External Assessment (Viva Voce along with Power Point Presentation about the Teaching Subjects, Curricular and co-curricular activities in School during Internship)	150 Marks
		TOTAL	900 Marks

9. EVALUATION

EVALUATION OF THEORY PAPERS

Some theory papers will carry a weightage of 100 marks, out of which 80 marks will be for external University Examination and 20 marks will be for internal sessional work. Out of 20 marks - 10 marks will be for sessional and 10 marks will be for mid-term test. In some of the papers carrying a weightage of 50 marks, 40 marks will be for external University Examination and 10 marks will be for internal sessional work. Out of 10 marks (5 marks will be for sessional and 5 marks) will be for mid-term test.

The final external examination paper for 80 marks will be of three hour's duration and the paper for 40 marks will be of two hour's duration.

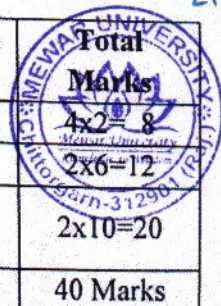
1. Each question paper (80 MARKS) will have three sections- **Section A** will contain 10 very short answer type questions and the candidate will be required to attempt the entire ten questions. Each question will carry two marks. **Section-B** will contain 10 short answer type questions out of which a candidate is required to attempt any 5 questions (one question per unit to be attempted out of two questions per unit). Each question will carry 6 marks. **Section-C** will have 5 Essay Type Questions (one from each unit) and a candidate will be required to attempt any three questions. There will be 10 marks for each question.
2. Each question paper (40 MARKS) will have three sections- **Section A** will contain 4 very short answer type questions and the candidate will be required to attempt all four questions. Each question will carry 2 marks. **Section-B** will contain 3 short answer type questions out of which a candidate is required to attempt any 2 questions. Each question will carry 6 marks. **Section-C** will have 3 questions with a choice of attempting any 2 questions. Essay type questions will carry 10 marks each.
3. Very short answer type questions would aim at testing of critical thinking, knowledge of concepts, facts, definitions, laws, principles, generalization etc. and also understanding of principles and concepts.
4. Short answer type questions would aim at testing knowledge, definitions, laws, generalization etc. and understanding of concepts.
5. Essay type questions are to aim at testing the abilities of critical thinking behavioural change and application of principles taught in theory classes.

Format of Eighty (80) marks question paper (Three Hours Time)

Question Type	No. of Questions Per Unit	Total No. of Questions	No. of Questions to be attempted	Total Marks
Very Short Answer Type	2 Per Unit	10	10	10x2=20
Short Answer Type	2 Per Unit	10	5 (One Question per Unit to be attempted)	5x6=30
Long Answer (Essay) Type	1 Per Unit	5	3	3x10=30
TOTAL				80 marks

Format of Forty (40) marks question paper (Two Hours Time)

Question Type	No. of Questions Per Unit	Total No. of Questions	No. of Questions to be attempted	Total Marks
Very Short Answer Type	1/2 Per Unit	4	4	4x2=8
Short Answer Type	1 Per Unit	3	2	2x6=12
Long Answer (Essay) Type	1 Per Unit	3	2	2x10=20
Total				40 Marks



EVALUATION FOR INTERNSHIP PROGRAMME

Evaluation for Internship Programme will consist of two parts: Internal Evaluation & External Evaluation, the details of which are as follows:

Practical Work in B. Ed First Year

I. Pre Practice Teaching (Micro Teaching):

- a. Practicing Teaching (5 Skills in each Subject) 10+10 = 20 Marks
- b. T.L.M. Workshop in each Subject (5+5) = 10 Marks
- c. Simulated Teaching (5 Lessons in each Subject) = 10 marks
- d. Blue Print & Test Preparation in Both Subjects = 10 marks

Total: = 50 Marks

II. Practice Teaching:

- a. Peer Group Lesson Observation = 10 Marks
Ordinary + Criticism (5 Lessons in each round. 5+5 Marks)
- b. Practice Teaching Two Rounds: (One Round in each subject):
In the round of each subject 12 lessons + 1 Unit Test + 1 Criticism:
Lessons (50 + 50 Marks) = 100 Marks
Tests (10 + 10 Marks) = 20 Marks
Criticism in Peer Group (10 + 10 Marks) = 20 Marks

Total = 150 Marks

III. External Practical Exam:

Presentation of teaching practice in one Teaching Subject before Two External Examiners:
= 100 Marks

GRAND TOTAL = 300 Marks

Practical Work in B.Ed. Second Year

INTERNAL EVALUATION (Course-19) [II Year]		
1.	Teaching in Schools Internship (Date and period wise Record of teaching plan of the opted Teaching Subjects, which were to maintained for internship)	100 (50+50)
2.	Individual Activities and File Record	80
3.	Group Activities and File Record	30
4.	Teaching Aid (4)	20
5.	Community Engagement and Report writing	20
	Total Marks	250
EXTERNAL EVALUATION [II Year]		
1.	Course 20- Viva Voce with Power Point Presentation regarding the curricular and co-curricular activities during the Internship Programme	150
	TOTAL MARKS	400

EXTERNAL EVALUATION [I YEAR]

1. The weightage of Final Lesson will be 100 marks. Final lesson will be conducted at the end of first academic year i.e. after the completion of 1st phase of internship.
2. During the final practical examination, each candidate will have to teach one Lesson in any one of the two teaching subjects. However, he shall have to prepare lesson plan in both the teaching subjects and should be prepared to deliver lesson in both the subjects if required.
3. The Board of examiners for external examination will consist of:
 - (a) The Principal of the college concerned
 - (b) One senior member of the college
 - (c) Two external examiners appointed by the university.

Note: The selection of the faculty member and two examiners be such that, as far as possible, Board of Examiners represent all the three faculties-Humanities, Languages and Science and Commerce.

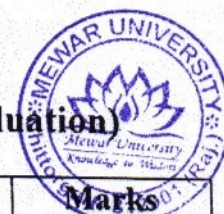
EXTERNAL EVALUATION [II YEAR]

1. The weightage of external evaluation (Viva-voce for 2nd phase) of internship will be 150 marks.
2. During the Viva voce, student will present all the records of the work done during the internship (2nd phase) programme viz. teaching in school, individual and group activities.
3. Power point presentation (Including Videos of various activities) of the work done by the students during the second phase of internship is desirable at the time of viva-voce.
4. The Board of examiners for Viva-voce will consist of:
 - (a) The Principal of the college concerned
 - (b) One senior member of the college (Preferably Internship Incharge)
 - (c) One external examiner appointed by the university.

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Evaluation of Open Air/SUPW Camp (I Year) (Internal Evaluation)

S. N.	Activity	Marks
1.	Participation in preparation of Camp	05
2.	Presentation of Survey Report / creative work	20
3.	Participation in Community Awareness Programme	15
4.	Participation in organizational process/community living/cultural and aesthetic activities	10
	Total Marks	50



10. WORKING OUT THE RESULT FOR AWARDING DIVISION



Table-II: Course of study for semester II

Course Code	Name of the course	No. of hours	Tutorial	Credit points
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II – Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I – Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
Total		32	4	29

*Non University Examination (NUE)

Table-III: Course of study for semester III

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering – Practical	4	-	2
Total		28	4	24

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Table-IV: Course of study for semester IV

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP401T	Pharmaceutical Organic Chemistry III- Theory	3	1	4
BP402T	Medicinal Chemistry I- Theory	3	1	4
BP403T	Physical Pharmaceutics II - Theory	3	1	4
BP404T	Pharmacology I - Theory	3	1	4
BP405T	Pharmacognosy and Phytochemistry I- Theory	3	1	4
BP406P	Medicinal Chemistry I - Practical	4	-	2
BP407P	Physical Pharmaceutics II - Practical	4		2
BP408P	Pharmacology I - Practical	4	-	2
BP409P	Pharmacognosy and Phytochemistry I - Practical	4	-	2
	Total	31	5	28

Table-V: Course of study for semester V

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP501T	Medicinal Chemistry II - Theory	3	1	4
BP502T	Industrial PharmacyI- Theory	3	1	4
BP503T	Pharmacology II - Theory	3	1	4
BP504T	Pharmacognosy and Phytochemistry II- Theory	3	1	4
BP505T	Pharmaceutical Jurisprudence - Theory	3	1	4
BP506P	Industrial PharmacyI - Practical	4	-	2
BP507P	Pharmacology II - Practical	4	-	2
BP508P	Pharmacognosy and Phytochemistry II - Practical	4	-	2
	Total	27	5	26



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Table-VI: Course of study for semester VI

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP601T	Medicinal Chemistry III – Theory	3	1	4
BP602T	Pharmacology III – Theory	3	1	4
BP603T	Herbal Drug Technology – Theory	3	1	4
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	3	1	4
BP605T	Pharmaceutical Biotechnology – Theory	3	1	4
BP606T	Quality Assurance – Theory	3	1	4
BP607P	Medicinal chemistry III – Practical	4	-	2
BP608P	Pharmacology III – Practical	4	-	2
BP609P	Herbal Drug Technology – Practical	4	-	2
Total		30	6	30

Table-VII: Course of study for semester VII

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP701T	Instrumental Methods of Analysis – Theory	3	1	4
BP702T	Industrial Pharmacy II – Theory	3	1	4
BP703T	Pharmacy Practice – Theory	3	1	4
BP704T	Novel Drug Delivery System – Theory	3	1	4
BP705P	Instrumental Methods of Analysis – Practical	4	-	2
BP706PS	Practice School*	12	-	6
Total		28	5	24

* Non University Examination (NUE)



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Table-VIII: Course of study for semester VIII

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP801T	Biostatistics and Research Methodology	3	1	4
BP802T	Social and Preventive Pharmacy	3	1	4
BP803ET	Pharma Marketing Management	3 + 3 = 6	1 + 1 = 2	4 + 4 = 8
BP804ET	Pharmaceutical Regulatory Science			
BP805ET	Pharmacovigilance			
BP806ET	Quality Control and Standardization of Herbals			
BP807ET	Computer Aided Drug Design			
BP808ET	Cell and Molecular Biology			
BP809ET	Cosmetic Science			
BP810ET	Experimental Pharmacology			
BP811ET	Advanced Instrumentation Techniques			
BP812ET	Dietary Supplements and Nutraceuticals			
BP813PW	Project Work	12	-	6
Total		24	4	22

Table-IX: Semester wise credits distribution

Semester	Credit Points
I	27/29 ^S /30 [#]
II	29
III	26
IV	28
V	26
VI	26
VII	24
VIII	22
Extracurricular/ Co curricular activities	01*
Total credit points for the program	209/211^S/212[#]

* The credit points assigned for extracurricular and or co-curricular activities shall be given by the Principals of the colleges and the same shall be submitted to the University. The criteria to acquire this credit point shall be defined by the colleges from time to time.

^SApplicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.

[#]Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course.



MEWAR UNIVERSITY

Examination Scheme (B.Sc Cardiac care Technology)
FIRST SEMESTER

THEORY

S.No	SUBJECT CODE	SUBJECTS	THEORY EXAM		TOTAL	CREDITS
			INTERNAL ASSESSMENT (C/P/A)	EXTERNAL ASSESSMENT		
1	BCCT101	Anatomy I	(35+15) 50	50	100	4
2	BCCT102	Physiology I	(35+15) 50	50	100	4
3	BCCT103	Biochemistry	(35+15) 50	50	100	4
4	BCCT104	Basic microbiology	(35+15) 50	50	100	4
5	BCCT105	Basic pathology	(35+15) 50	50	100	4
6	ELGA101	ELGA I		25	25	1

PRACTICAL

S.No	SUBJECT CODE	SUBJECTS	PRACTICAL EXAM			TOTAL
			EXPERIMENTS	SPOTTESTER	VIVA	
7	BCCT106	Anatomy I	20		30	50
8	BCCT107	Physiology I	20		30	50
9	BCCT108	Biochemistry	20		30	50
10	BCCT109	Pathology	20		30	50
11	BCCT110	Microbiology	20		30	50

SECOND SEMESTER

THEORY

S.No	SUBJECT CODE	SUBJECTS	THEORY EXAM		TOTAL	CREDITS
			INTERNAL ASSESSMENT (C/P/A)	EXTERNAL ASSESSMENT		
1	BCCT201	Anatomy II	(35+15) 50	50	100	4
2	BCCT202	Physiology II	(35+15) 50	50	100	4
3	BCCT203	Pathology+ Microbiology	(35+15) 50	50	100	4
4	BCCT204	ELGA II	(35+15) 50	50	100	4



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PRACTICAL

S.No	SUBJECT CODE	SUBJECTS	PRACTICAL EXAM		VIVA	RECOR D	TOTA L
			EXPERIM ENTS	SPOTTE R			
7	BCCT 206	Anatomy II	20		30		50
8	BCCT 207	Physiology II	20		30		50
9	BCCT 208	Pathology+ Microbiology	20		30		50

THIRD SEMESTER**THEORY**

S.No	SUBJECT CODE	SUBJECTS	THEORY EXAM		TOT AL	CERDI TS
			INTERNA L ASESSME NT(C/P/A)	EXTERNAL ASSESSMENT		
1	BCCT301	Pharmacology	(35+15) 50	50	100	4
2	BCCT302	Psychology & sociology	(35+15) 50	50	100	4
3	BCCT303	Basic cardiac care technology	(35+15) 50	50	100	4
4	BCCT304	Environmental Science	(35+15) 50	50	100	4

PRACTICAL

S.No	SUBJECT CODE	SUBJECTS	PRACTICAL EXAM		VIVA	RECOR D	TOTA L
			EXPERIM ENTS	SPOTTE R			
7	BCCT 305	Pharmacology	20		30		50
8	BCCT 306	Psychology & sociology	20		30		50
9	BCCT 307	Basic cardiac care technology	20		30		50



FORTH SEMESTRE

THEORY

S.No	SUBJECT CODE	SUBJECTS	THEORY EXAM		TOTAL	CREDITS
			INTERNAL ASSESSMENT(C/P/A)	EXTERNAL ASSESSMENT		
1	BCCT401	Basic Patient care	(35+15) 50	50	100	4
2	BCCT402	Basic cardiac Evaluation	(35+15) 50	50	100	4
3	BCCT403	Basics of Medical Disorders	(35+15) 50	50	100	4
4	BCCT404	Fundamentals of Computer Science	(35+15) 50	50	100	4
5	BCCT405	Hospital Training Short Term		150	150	6

PRACTICAL

S.No	SUBJECT CODE	SUBJECTS	PRACTICAL EXAM		VIVA	RECORDED	TOTAL
			EXPERIMENTS	SPOTTE R			
7	BCCT 405	Basic Patient care	20		30		50
8	BCCT 406	Basic cardiac Evaluation	20		30		50
9	BCCT 407	Basics of Medical Disorders	20		30		50
10s	BCCT408	Fundamentals of Computer Science	20		30		50

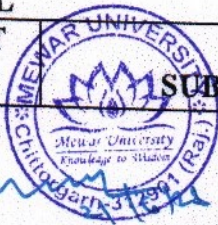
FIFTH SEMESTRE

THEORY

S.No	SUBJECT CODE	SUBJECTS	THEORY EXAM		TOTAL	CREDITS
			INTERNAL ASSESSMENT(C/P/A)	EXTERNAL ASSESSMENT		
1	BCCT501	Cardiac Evaluation	(35+15) 50	50	100	4
2	BCCT502	Basic Cardiac Evaluation And Therapies Part I	(35+15) 50	50	100	4
3	BCCT503	Coronary Angiography	(35+15) 50	50	100	4
4	BCCT504	Research & Bio Statistics	(35+15) 50	50	100	4

PRACTICAL

S.No	SUBJECT CODE	SUBJECTS	PRACTICAL EXAM		VIVA	RECORDED	TOTAL
			EXPERIMENTS	SPOTTE R			



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			ENTS	R	D	L
7	BCCT 505	Cardiac Evaluation	20		30	50
8	BCCT 506	Basic Cardiac Evacuation And Therapies Part I	20		30	50
9	BCCT507	Coronary Angiography	20		30	50

SIXTH SEMESTRE

THEORY

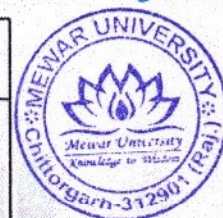
S.No	SUBJECT CODE	SUBJECTS	THEORY EXAM		TOTAL	CREDITS
			INTERNAL ASSESSMENT (C/P/A)	EXTERNAL ASSESSMENT		
1	BCCT601	Basic Cardiac Evaluation And Therapies Part II	(35+15) 50	50	100	4
	BCCT602	Cardiac Care Technology Clinical	(35+15) 50	50	100	4
3	BCCT603	Cardiac Care Technology Applied	(35+15) 50	50	100	4
4	BCCT604	Basic Intensive Care	(35+15) 50	50	100	4

PRACTICAL

S.No	SUBJECT CODE	SUBJECTS	PRACTICAL EXAM		VIVA	RECORD	TOTAL
			EXPERIMENTS	SPOTTE R			
7	BCCT 605	Basic cardiac evaluation and therapies part 2	20		30		50
8	BCCT 606	Cardiac care technology clinical	20		30		50
	BCCT607	Cardiac care technology applied	20		30		50
10	BCCT608	Basic intensive care	20		30		50

FOURTH YEAR

S.No	SUBJECT CODE	SUBJECT	TOTAL MARK
01	BCCT 701	In the fourth semester, the students will be posted to train in a hospital or diagnosis center sand to carry out project work simultaneously. It is a training program for developing the candidate as a professional in the field. The training posting report as well	800



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		as project work must be submitted with duly signed by the HOD of the B.Sc Cardiac care Technology Department to the academic section of university or college as the part of the completion of the course.	
02	BCCT 702	Comprehensive academic and general viva voce	200

B.Sc. Cardiac Care Technology
Semester I Paper 1-
[BCCT-101]: ANATOMY [INCLUDING HISTOLOGY]

S.No.	Topics To Be Covered
Chapter 1	Introduction: human body as a whole Definition of anatomy and its subdivisions Anatomical nomenclature and terminology (planes & positions) Surface Anatomy of main structures and vessels
Chapter 2	Applied anatomy & Joints Musculoskeletal system Connective tissue & its modification, tendons, membranes, special connective tissue. Bone structure, blood supply, growth, ossification, and classification. Muscle classification, structure and functional aspect. Joints classification, structures of joints, movements, range, limiting factors, stability, blood supply Nerve supply, dislocations and applied anatomy
Chapter 3	Upper extremity Bony architecture, Joints – structure, range of movement, Muscles – origin, insertion, actions, nerve supply Major nerves – course, branches and implications of nerve injuries Development of limb bones, muscles and anomalies Radiographic identification of bone and joints Applied anatomy
Chapter 4	Lower extremity Bony architecture Joints – structure, range of movement Muscles – origin, insertion, actions, nerve supply Major nerves – course, branches and implications of nerve injuries Development of limb bones, muscles and anomalies Radiographic identification of bone and joints Applied anatomy



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MEWAR UNIVERSITY

COURSE SYLLABUS

For

**B. Sc. Agriculture as per the 5th
Deans' Committee**



Pratim Singh Shukla

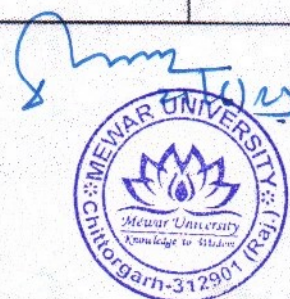
Semester- wise distribution of courses

S.No	Course Code	I Semester	Credit Hours
1.	HORT-111	Fundamentals of Horticulture	2 (1+1)
2.	MBB-111	Fundamentals of Plant Biochemistry and Biotechnology	3(2+1)
3.	SCHEM-111	Fundamentals of Soil Science	3(2+1)
4.	FOR-111	Introduction to Forestry	2 (1+1)
5.	ENG-111	Comprehension & Communication Skills in English	2 (1+1)
6.	AGRO-111	Fundamentals of Agronomy	4(3+1)
7.	BIO-111	Introductory Biology*/Elementary Mathematics*	2(1+1)/ 2(2+0)*
8.	EXT-111	Agriculture Heritage*	1(1+0)*
9.	EXT-112	Rural Sociology & Educational Psychology	2 (2+0)
10.	EXT-113	Human Values & Ethics (non gradial)	1(1+0)**
11.	NSS-111	NSS/NCC/Physical Education & Yoga Practices**	2 (0+2)**
TOTAL			18+03**+03**
*R: Remedial course; **NSS/NCC: Non-gradial courses			

S.N O.		II Semester	
1.	PBG-121	Fundamentals of Genetics	3(2+1)
2.	MBB-122	Agricultural Microbiology	2(1+1)
3.	AE-121	Soil and Water Conservation Engineering	2(1+1)
4.	PPHY-121	Fundamentals of Crop Physiology	2(1+1)
5.	ECO-121	Fundamentals of Agricultural Economics	2(2+0)
6.	PPATH-121	Fundamentals of Plant Pathology	4(3+1)
7.	ENTO-121	Fundamentals of Entomology	4(3+1)
8.	EXT-121	Fundamentals of Agricultural Extension Education	3(2+1)
9.	EXT-122	Communication Skills and Personality Development	2(1+1)
10	NSS-121	National Service Scheme II*	2(0=2) *
	Total	*NSS: Non-gradial courses	24(16+8)+02 *



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S.N O.	COURSE CODE	III Semester	CREDIT HOURS
1.	AGRO-211	Crop Production Technology – I (<i>Kharif Crops</i>)	2 (1+1)
2.	PBG-211	Fundamentals of Plant Breeding	3 (2+1)
3.	ECO-211	Agricultural Finance and Cooperation	3 (2+1)
4.	EXT-211	Agriculture Informatics	2(1+1)
5.	AE-211	Farm Machinery and Power	2 (1+1)
6.	HORT-211	Production Technology for Vegetables and Spices	2 (1+1)
7.	ENVT-211	Environmental Studies and Disaster Management	3(2+1)
8.	STAT-211	Statistical Methods	2(1+1)
9.	AH-211	Livestock and Poultry Management	4 (3+1)
10.	NSS-211	National Service Scheme III*	2(0=2) *
Total		*NSS: Non-gradial courses	23(14+9)+02 *

S.NO.	COURSE CODE	IV Semester	CREDIT HOURS
1.	AGRO-221	Crop Production Technology –II (<i>Rabi Crops</i>)	2(1+1)
2.	HORT-221	Production Technology for Ornamental Crops, MAP and Landscaping	2(1+1)
3.	ENVT-221	Renewable Energy and Green Technology	2(1+1)
4.	SCHEM-221	Problematic Soils and their Management	2(2+0)
5.	HORT-221	Production Technology for Fruit and Plantation Crops	2(1+1)
6.	PBG-221	Principles of Seed Technology	3(1+2)
7.	AGRO-222	Farming System & Sustainable Agriculture	1(1+0)
8.	ECO-221	Agricultural Marketing Trade & Prices	3(2+1)
9.	AGRO-223	Introductory Agro-meteorology & Climate Change	2(1+1)
10.		Elective Course- To be selected from Annexure-II	3 credit
11.	NSS-221	National Service Scheme III*	2(0=2) *
Total		*NSS: Non-gradial courses	19(11+8)+ 3cr.+02*



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S.NO.	COURSE CODE	V Semester	CREDIT HOURS
1.	PPATH-311	Principles of Integrated Pest and Disease Management	3(2+1)
2.	SCHEM-311	Manures, Fertilizers and Soil Fertility Management	3 (2+1)
3.	ENTO-311	Pests of Crops and Stored Grain and their Management	3 (2+1)
4.	PPATH-312	Diseases of Field and Horticultural Crops and their Management -I	3 (2+1)
5.	PBG-311	Crop Improvement-I (<i>Kharif Crops</i>)	2 (1+1)
6.	ECO-311	Entrepreneurship Development and Business Communication	2 (1+1)
7.	AGRO-311	Geoinformatics and Nano-technology for Precision Farming	2 (1+1)
8.	AGRO-312	Practical Crop Production – I (<i>Kharif crops</i>)	2 (0+2)
9.	EXT-311	Intellectual Property Rights	1(1+0)
10.		Elective Course- To be selected from Annexure-II	3 credit
Total			21(12+09)+ 3 Credit

S.NO.	COURSE CODE	VI Semester	CREDIT HOURS
1.	AGRO-321	Rainfed Agriculture & Watershed Management	2 (1+1)
2.	AE-322	Protected Cultivation and Secondary Agriculture	2 (1+1)
3.	PPATH-321	Diseases of Field and Horticultural Crops and their Management-II	3 (2+1)
4.	HORT-321	Post-harvest Management and Value Addition of Fruits and Vegetables	2 (1+1)
5.	ENTO-321	Management of Beneficial Insects	2 (1+1)
6.	PBG-321	Crop Improvement-II (<i>Rabi crops</i>)	2 (1+1)
7.	AGRO-323	Practical Crop Production –II (<i>Rabi crops</i>)	2 (0+2)
8.	AGRO-324	Principles of Organic Farming	2 (1+1)
9.	AE-321	Farm Management, Production & Resource Economics	2 (1+1)
10.	HORT-322	Principles of Food Science and Nutrition	2(2+0)
11.		Elective Course- To be selected from Annexure-II	3 credits
Total			21 (11 + 10)+ 3 cr.



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VII Semester			
SN.	RAWE 411- Rural Agricultural Work Experience and Agro-industrial Attachment (RAWE & AIA)-	No. of weeks	Credit Hours
	Activities		
1	General orientation & On campus training by different faculties	1	14
2	Village attachment/ Unit attachment in University/ College/ KVK/ Research Station.	8	
3	Agro-Industrial Attachment	10	06
4	Project Report Preparation, Presentation and Evaluation	1	
Total weeks for RAWE & AIA		20	20

VIII Semester	
Module: Experiential Learning Programme (ELP)/ Hands on training (HOT)	Credit Hr.
1. Module-I	0+10
2. Module-II	0+10
Total	20 (0+20)

Experiential Learning Programme (ELP)/ Hands On Training (HOT)

This program will be undertaken by the students preferably during the eighth semester for a total duration of 24 weeks with a weightage of 0+20 credit hours. The students will register for any of two modules, listed below, of 0+10 credit hours each.

1. Production Technology Bio-agents and Bio-fertilizer
2. Seed Production and Technology
3. Mushroom Cultivation Technology
4. Soil, Plant, Water and Seed Testing
5. Poultry Production Technology
6. Hybrid Seed Production Technologies
7. Floriculture and Landscaping
8. Food Processing
9. Commercial Horticulture



10. Agriculture Waste Management

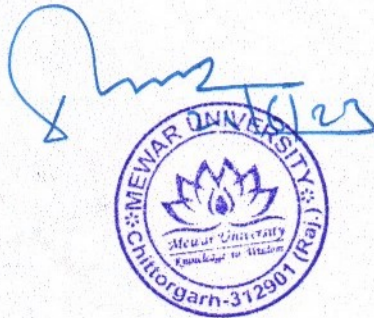
11. Organic Production Technology

12. Commercial Sericulture

In addition to these ELP modules other important modules may be given to the students by SAUs. Indian Council of Agricultural Research has already provided financial help for establishment of two or more Experiential Learning units in different State Agricultural Universities, hence, each university is expected to plan EL program accordingly.



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MEWAR UNIVERSITY, RAJASTHAN

FACULTY OF SCIENCE & TECHNOLOGY

COURSE: B.Sc. (Hons.) AIRCRAFT MAINTENANCE

I SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voice	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1		BSC101	Physics	3	1	0	4	4	15	35	50	0	0	100
2		BSC102	Mathematics-I	3	1	0	4	4	15	35	50	0	0	100
3	Basic Science course	BSC103	Chemistry	3	1	0	4	4	15	35	50	0	0	100
4		BSC104	Physics Lab	0	0	2	2	1	0	0	0	25	25	50
5		BSC105	Chemistry Lab	0	0	2	2	1	0	0	0	25	25	50
6	Engineering Science Courses	ESC101	Basic Electrical Engineering	3	1	0	4	4	15	35	50	0	0	100
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	2	0	0	0	50	50	100
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
TOTAL				12	4	10	26	21						650

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Ms. Geetima Gang

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II SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P							
1	Basic Science course	BSC106	Mathematics –II	3	1	0	4	15	35	50	0	0	100
2		ESC104	Programming for Problem Solving	3	1	0	4	15	35	50	0	0	100
3	Engineering Science Courses	ESC105	Engineering Mechanics	3	1	0	4	15	35	50	0	0	100
4		ESC106	Basic Electronics	3	1	0	4	15	35	50	0	0	100
5		ESC107	Programming for Problem Solving Lab	0	0	4	4	0	0	0	50	50	100
6		ESC108	Workshop Practices Lab	0	0	4	4	0	0	0	50	50	100
7	Humanities and Social Sciences including Management courses	HSMC 101	English	2	0	0	2	10	15	25	0	0	50
8		HSMC 102	English Lab	0	0	2	2	0	0	0	25	25	50
9	Mandatory courses	MC-I	Environmental Science	2	0	0	2	0	0	0	0	0	0
TOTAL				16	4	10	30						700



Ms. Gaurina Gang



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III SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	BAME-301	Aircraft Structure & Associated Systems	3	1	0	4	4	15	35	50	0	0	100
2		BAME-302	Aerodynamics	3	1	0	4	4	15	35	50	0	0	100
3		BAME-303	Aircraft Materials & Hardware	3	1	0	4	4	15	35	50	0	0	100
4		BAME-304	Aircraft Structure & Associated Systems Lab	0	0	2	2	1	0	0	0	25	25	50
5		BAME-305	Aerodynamics Lab	0	0	2	2	1	0	0	0	25	25	50
6		BAME-306	Aircraft Materials & Hardware Lab	0	0	2	2	1	0	0	0	25	25	50
7	Humanities and Social Sciences, including	HSMC201	Organizational Behavior	3	0	0	3	3	10	25	40	0	0	75
TOTAL				12	3	6	21	18						525

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Ms. Garima Gang

IV SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P							
1	Professional Core courses	BAME-401	Electrical Fundamentals-I	3	1	0	4	15	35	50	0	0	100
2		BAME-402	Electronic Fundamentals & Digital Techniques-I	3	1	0	4	15	35	50	0	0	100
3		BAME-403	Composites & Fibers	3	1	0	4	15	35	50	0	0	100
4		BAME-404	Aircraft Maintenance & Practices	3	1	0	4	15	35	50	0	0	100
5		BAME-405	Electrical Fundamentals-I Lab	0	0	2	2	0	0	0	25	25	50
6		BAME-406	Electronic Fundamentals & Digital Techniques-I Lab	0	0	2	2	0	0	0	25	25	50
7		BAME-407	Composites & Fibers Lab	0	0	2	2	0	0	0	25	25	50
8		BAME-408	Aircraft Maintenance & Practices Lab	0	0	2	2	0	0	0	25	25	50
9	Humanities and Social Sciences including Management courses	H-102	Universal Human Values 2: Understanding Harmony	3	0	0	3	10	25	40	0	0	75
TOTAL				15	4	8	27						675

Ms. Gauri Garg



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V SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1		BAME-501	Electrical Fundamentals-II	3	1	0	4	4	15	35	50	0	0	100
2		BAME-502	Electronic Fundamentals & Digital Techniques-II	3	1	0	4	4	15	35	50	0	0	100
3		BAME-503	Gas Turbine Engine	3	1	0	4	4	15	35	50	0	0	100
4		BAME-504	Piston Engines & Propellers	3	1	0	3	4	15	35	50	0	0	100
5	Professional Core courses	BAME-505	Human Factors	3	1	0	3	4	15	35	50	0	0	100
6		BAME-506	Electrical Fundamentals-II Lab	0	0	2	2	1	0	0	0	25	25	50
7		BAME-507	Electronic Fundamentals & Digital Techniques-II Lab	0	0	2	2	1	0	0	0	25	25	50
8		BAME-508	Gas Turbine Engine Lab	0	0	2	2	1	0	0	0	25	25	50
9		BAME-509	Piston Engines & Propellers Lab	0	0	2	2	1	0	0	0	25	25	50
10		BAME-510	Human Factors Lab	0	0	2	2	1	0	0	0	25	25	50
11	Humanities and Social Sciences including Management courses	HSMC301 (OEL II)	Humanities I (Effective Technical Communication)	2	0	0	2	2	10	15	25	0	0	50
TOTAL				17	5	10	30	27						800


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VI SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	BAME-601	Avionics	3	1	0	3	4	15	35	25	0	0	100
2		BAME-602	Transducers & Sensors	3	1	0	2	4	15	35	25	0	0	100
3		BAME-603	Aircraft Systems-I	3	1	0	3	4	15	35	25	0	0	100
4		BAME-604	Quality Management System	3	1	0	3	4	15	35	25	0	0	100
5		BAME-605	Typical Aircraft Maintenance- Fixed Wing Light/ Composite Aircraft	3	1	0	3	4	15	35	25	0	0	100
6		BAME-606	Avionics Lab	0	0	2	2	1	0	0	0	25	25	50
7		BAME-607	Transducers & Sensors Lab	0	0	2	2	1	0	0	0	25	25	50
8		BAME-608	Aircraft Systems-I Lab	0	0	2	2	1	0	0	0	25	25	50
9		BAME-609	Quality Management System Lab	0	0	2	2	1	0	0	0	25	25	50
10	Mandatory courses	MC-II	Essence of Indian Knowledge Tradition	2	0	0	2	0	0	0	0	0	0	0
TOTAL				17	5	8	24							700





 Ms. Garima Garg



VII SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1		BAME-701	Workshop Practices	3	1	0	3	4	15	35	25	0	0	100
2		BAME-702	Aircraft Systems-II	3	1	0	3	4	15	35	25	0	0	100
3		BAME-703	Corrosion & NDT Techniques	3	1	0	3	4	15	35	25	0	0	100
4		BAME-704	Ground Handling Safety & Support System	3	1	0	3	4	15	35	25	0	0	100
5	Professional Core courses	BAME-705	Typical Aircraft Maintenance- Fixed Wing Heavy/ Complex Aircraft	3	1	0	4	4	15	35	25	0	0	100
6		BAME-706	Workshop Practices Lab	0	0	2	2	1	0	0	0	25	25	50
7		BAME-707	Aircraft Systems-II Lab	0	0	2	2	1	0	0	0	25	25	50
8		BAME-708	Corrosion & NDT Techniques Lab	0	0	2	2	1	0	0	0	25	25	50
9		BAME-709	Ground Handling Safety & Support System Lab	0	0	2	2	1	0	0	0	25	25	50
10	Mandatory courses	MC-III	Constitution of India	2	0	0	2	0	0	0	0	0	0	0
11	Project (Or Summer internship)	PROJ AME 401	Short Term Training (21-45 Days)/ Project-III	0	0	6	6	3	0	0	0	150	150	150
TOTAL				17	5	14	32	27						850

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Ms. Garima Gang



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VIII SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	Project Report	Internal Evaluation	Industry Evaluation	Internal Practical	End Term Practical	Total Marks	
				L	T	P									
1	Project	BAME-801	Comprehensive Academic and General Proficiency Viva-Voce	0	0	0	2	2	0	0	50	0	0	50	
2		BAME-802	Industrial Internship/Project-IV	0	0	20	20	10	100	100	300	0	0	500	
TOTAL				0	0	20	10	10						500	
TOTAL CREDITS								173	TOTAL MARKS						5400

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Ms. Garima Garg



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MEWAR UNIVERSITY

COURSE: B.Tech BRANCH: Chemical Engineering

I SEMESTER

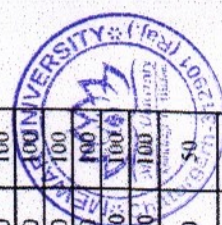
S.No.	Category	Course Code	Course Title	Contact hours per Week			Credits	TA	End Term	Internal Practical	End Term	Total Marks
				L	T	P						
1	Basic Science course	BSC101	Physics	3	1	0	4	15	0	50	0	100
2		BSC102	Mathematics-I	3	1	0	4	15	0	50	0	100
3		BSC103	Chemistry	3	1	0	4	15	0	50	0	100
4		BSC104	Physics Lab	0	0	2	2	0	0	25	25	50
5		BSC105	Chemistry Lab	0	0	2	2	0	0	25	25	50
6	Engineering Science Courses	ESC101	Basic Electrical Engineering	3	1	0	4	15	0	50	0	100
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	0	0	50	50	100
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	0	0	25	25	50
TOTAL				12	4	10	26					650

II SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Credits	TA	End Term	Internal Practical	End Term	Total Marks
				L	T	P						
1	Basic Science course	BSC106	Mathematics -II	3	1	0	4	15	0	50	0	100
2		ESC104	Programming for Problem Solving	3	1	0	4	15	0	50	0	100
3		ESC105	Engineering Mechanics	3	1	0	4	15	0	50	0	100
4	Engineering Science Courses	ESC106	Basic Electronics	3	1	0	4	15	0	50	0	100
5		ESC107	Programming for Problem Solving Lab	0	0	4	4	0	0	50	50	100
6	Humanities and Social Sciences	ESC108	Workshop Practices Lab	0	0	4	4	0	0	50	50	100
7		HSMC 101	English	2	0	0	2	10	0	25	0	50
8		HSMC 102	English Lab	0	0	2	2	0	0	25	25	50
9	Mandatory courses	MC-I	Environmental Science	2	0	0	2	0	0	0	0	0
TOTAL				16	4	10	30					700

III SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Credits	TA	End Term	Internal Practical	End Term	Total Marks
				L	T	P						
1	Basic Science course	BSC107	Mathematics-III	3	1	0	4	15	0	50	0	100
2		BSC108	Biology for Engineers	2	0	0	2	10	0	25	0	50
3		BSC109	Chemistry-II	3	0	0	3	10	0	40	0	75
4	Engineering Science Courses	ESC109	Thermodynamics-I	3	1	0	4	15	0	50	0	100
5		PCC-CH101	Transport Phenomena	3	1	0	4	15	0	50	0	100
6		PCC-CH102	Fluid Mechanics	3	1	0	4	15	0	50	0	100



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S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact	Credits	TA	End Term	Internal Practical	End Term	Total Marks
				L	T	P							
7	Core courses	PCC-CH103	Heat Transfer	3	1	0	4	4	15	35	0	0	100
8		PCC-CH104	Chemical Engineering Lab-I	0	0	2	2	1	0	0	25	25	50
9	Humanities and Social Sciences including Management courses	HSMC201	Organizational Behavior	3	0	0	3	3	10	25	0	0	75
TOTAL				23	5	2	30	29					750

IV SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact	Credits	TA	End Term	Internal Practical	End Term	Total Marks	
				L	T	P								
1	Professional Core courses	PCC-CH105	Material & Energy Balance Computations	3	1	0	4	4	15	35	0	0	100	
2		PCC-CH106	Mass Transfer-I	3	1	0	4	4	15	35	0	0	100	
3		PCC-CH107	Thermodynamics-II	3	1	0	4	4	15	35	0	0	100	
4		PCC-CH108	Chemical Reaction Engineering-I	3	1	0	4	4	15	35	0	0	100	
5		PCC-CH109	Process Control	3	1	0	4	4	15	35	0	0	100	
6		PCC-CH110	Chemical Engineering Lab-II	0	0	2	2	1	0	0	25	25	50	
7		PCC-CH111	Chemical Reaction Engineering Lab	0	0	2	2	1	0	0	25	25	50	
8		PCC-CH112	Instrumentation & Control Lab	0	0	2	2	1	0	0	25	25	50	
9		Humanities and Social Sciences including Management	H-102	Universal Human Values 2: Understanding Harmony	3	0	0	3	3	10	25	0	0	75
TOTAL				18	5	6	29	26					725	

V SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact	Credits	TA	End Term	Internal Practical	End Term	Total Marks
				L	T	P							
1	Professional Core courses	PCC-CH113	Numerical Methods in Chemical Engineering	3	1	0	4	4	15	35	0	0	100
2		PCC-CH114	Particle & Fluid Particle Processing	3	1	0	4	4	15	35	0	0	100
3		PCC-CH115	Mass Transfer-II	3	1	0	4	4	15	35	0	0	100
4		PCC-CH116	Chemical Reaction Engineering-II	4	0	0	4	4	15	35	0	0	100
5	Professional Elective courses	PEC-EL321-325	Design and Simulation Lab	0	0	2	2	1	0	0	25	25	50
6		PEC-EL321-325	Elective-I	3	0	0	3	3	10	25	0	0	75
7	Humanities and Social Sciences including Management courses	HSMC301 (OEL II)	Elective-II	3	0	0	3	3	10	25	0	0	75
8		Project (Summer internship)	Project	Humanities I (Effective Technical Communication)	2	0	0	2	2	10	15	25	50
TOTAL				18	2	4	24	22					600



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VI SEMESTER														
S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact	Credits	TA	End Term	End Term	Internal Practical	End Term	Total Marks
				L	T	P								
1	Professional Core courses	PCC-CH118	Process Technology & Economics	3	1	0	4	4	15	35	50	0	0	100
2		PCC-CH119	Process Technology Lab	0	0	2	2	1	0	0	0	25	25	50
3	Professional Elective courses	PEC-EL421-425	Elective-III	3	0	0	3	3	10	25	40	0	0	75
4		PEC-EL421-425	Elective-IV	3	0	0	3	3	10	25	40	0	0	75
5	Open Elective courses	OEC-401	Open Elective I	3	0	0	3	3	10	25	40	0	0	75
6	Mandatory courses	MC-II	Essence of Indian Knowledge Tradition	2	0	0	2	0	0	0	0	0	0	0
7	Project	PROJ-CH 302	Project-II(Major Project)	0	0	10	10	5	0	0	0	125	125	250
TOTAL				14	1	12	27	19						625

VII SEMESTER														
S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact	Credits	TA	End Term	End Term	Internal Practical	End Term	Total Marks
				L	T	P								
1	Professional Elective courses	PEC-EL431-435	Elective-V	3	0	0	3	3	10	25	40	0	0	75
2		PEC-EL431-435	Elective-VI	3	0	0	3	3	10	25	40	0	0	75
3	Open Elective courses	OEC-402	Open Elective II	3	0	0	3	3	10	25	40	0	0	75
4		OEC-403	Open Elective III	3	0	0	3	3	10	25	40	0	0	75
5	Mandatory courses	MC-III	Constitution of India	2	0	0	2	0	0	0	0	0	0	0
6	Project (Or Summer internship)	PROJ-CH 401	Short Term Training (21-45 Days)/Project III	0	0	6	6	3	0	0	0	0	150	150
TOTAL				14	0	6	20	15						450

VIII SEMESTER														
S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact	Credits	Project Report	Internal Evaluati	Industry Evaluati	Internal Practical	End Term	Total Marks
				L	T	P								
1	Project	PROJ-CH 402	Industrial Internship/Project-IV	0	0	20	20	10	100	100	300	0	0	500
TOTAL				0	0	20	20	10	100	100	300	0	0	500
TOTAL				0	0	20	20	10	100	100	300	0	0	500
TOTAL							165							5000

Professional Elective courses (15)

(321)Water Conservation and Management

Open Elective Courses (12)

Soft Skills and Interpersonal Communicatio

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PEC-EL321-325	(322) Sustainability Engineering
	(323) Interfacial Engineering
	(324) Nanoscience and Nanotechnology
	(325) Advanced Separation Processes
	(421) Polymer Science and Engineering
PEC-EL 421-425	(422) Environmental Pollution and Control
	(423) Renewable Energy
	(424) Optimization Methods
	(425) Petrochemical Technology
PEC-EL 431-435	(431) Chemical Reactor Analysis
	(432) Nuclear Reactor Technology
	(433) Energy Management in Process Industries
	(434) Energy Management in Process Industries
	(435) Food Technology

ICT for Development	OEC-401	
Human Resource Development and Organizational Behavior		
Entrepreneurship		
Introduction to Philosophical Thoughts		
Comparative Study of Literature		OEC-402
Indian Music System		
History of Science & Engineering		
Introduction to Art and Aesthetics		
Cyber Law and Ethics		OEC-403
Advanced Engineering Mathematics		
Quality Control And Reliability		

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Mewar University Chittorgarh (Rajasthan)



**MEWAR UNIVERSITY CHITTORGARH
(RAJASTHAN)**

**Department of Civil Engineering
Faculty of Engineering and Technology
SCHEME, CURRICULUM AND SYLLABUS**

Four – Year (Regular) B Tech: Civil Engineering

Syllabus as per AICTE Effective from 2021-2022 Session

MEWAR UNIVERSITY

SYLLABUS EFFECTIVE FROM 2021-22

COURSE: Bachelor of Technology. BRANCH: Civil Engineering

I SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC101	Physics	3	1	0	4	4	15	35	50	0	0	100
2		BSC102	Mathematics-I	3	1	0	4	4	15	35	50	0	0	100
3		BSC103	Chemistry	3	1	0	4	4	15	35	50	0	0	100
4	Engineering Science Courses	BSC104	Physics Lab	0	0	2	2	1	0	0	0	25	25	50
5		BSC105	Chemistry Lab	0	0	2	2	1	0	0	0	25	25	50
6	Engineering Science Courses	ESC101	Basic Electrical Engineering	3	1	0	4	4	15	35	50	0	0	100
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	2	0	0	0	50	50	100
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
TOTAL				12	4	10	26	21						650



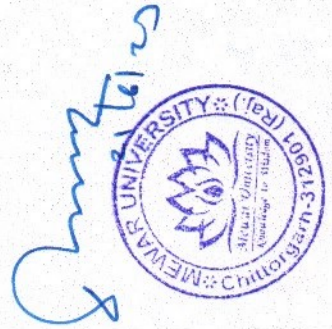
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II SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 - Viva-Voice	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC106	Mathematics -II	3	1	0	4	4	15	35	50	0	0	100
2		ESC104	Programming for Problem Solving	3	1	0	4	4	15	35	50	0	0	100
3	Engineering Science Courses	ESC105	Engineering Mechanics	3	1	0	4	4	15	35	50	0	0	100
4		ESC106	Basic Electronics	3	1	0	4	4	15	35	50	0	0	100
5		ESC107	Programming for Problem Solving Lab	0	0	4	4	4	2	0	0	50	50	100
6	Humanities and Social Sciences including Mandatory courses	ESC108	Workshop Practices Lab	0	0	4	4	4	2	0	0	50	50	100
7		HSMC 101	English	2	0	0	2	2	10	15	25	0	0	50
8		HSMC 102	English Lab	0	0	2	2	2	1	0	0	25	25	50
9		MC-I	Environmental Science	2	0	0	2	2	0	0	0	0	0	0
TOTAL				16	4	10	30	23						700




Dr. Egar

III SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	T.A	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks									
				L	T	P																	
1	Basic Science course	BSC107	Mathematics III	3	1	0	4	4	15	35	50	0	0	100									
2		BSC108	Biology for Engineers	2	0	0	2	2	10	15	25	0	0	50									
4	Professional Core courses	PCC- CE201	Introduction to Solid Mechanics	3	0	0	3	3	10	25	40	0	0	75									
5		PCC- CE202	Engineering Geology	3	0	0	3	3	10	25	40	0	0	75									
6		PCC- CE203	Introduction to Fluid Mechanics	3	1	0	4	3	10	25	40	0	0	75									
7		PCC- CE204	Surveying & Geomatics	3	0	0	4	3	10	25	40	0	0	75									
8	Humanities and Social Sciences including Management courses	PCC- CE205	Fluid Mechanics Lab	0	0	2	2	1	0	0	0	25	25	50									
9		PCC- CE206	Solid Mechanics Lab	0	0	2	2	1	0	0	0	25	25	50									
10		PCC- CE207	Surveying & Geomatics Lab	0	0	2	2	1	0	0	0	25	25	50									
3		HSMC201	Organizational Behavior	3	0	0	3	3	10	25	40	0	0	75									
TOTAL													20	2	6	29	24						675


 Dr. Esan


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IV SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC- CE208	Materials, Testing & Evaluation	3	0	0	3	3	10	25	40	0	0	75
2		PCC- CE209	Construction Engineering & Management	3	0	0	3	3	10	25	40	0	0	75
3		PCC- CE210	Mechanics of Materials	3	0	0	3	3	10	25	40	0	0	75
4		PCC- CE211	Hydraulic Engineering	3	0	0	3	3	10	25	40	0	0	75
5		PCC- CE212	Structural Analysis	3	0	0	3	3	10	25	40	0	0	75
6		PCC- CE213	Computer Aided Drawing Lab	0	0	2	2	1	0	0	0	25	25	50
7		PCC- CE214	Hydraulic Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
8		PCC- CE215	Materials, Testing & Evaluation Lab	0	0	2	2	1	0	0	0	25	25	50
9	Humanities and Social Sciences including Management	H-102	Universal Human Values 2: Understanding Harmony	3	0	0	3	3	10	25	40	0	0	75
TOTAL				18	0	6	24	21						600



Dr. Egar

V SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2/Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC-CE 301	Transportation Engineering	3	0	0	3	3	10	25	40	0	0	75
2		PCC-CE 302	Hydrology & Water Resources Engineering	3	0	0	3	3	10	25	40	0	0	75
		PCC-CE 303	Structural Engineering (Steel)	3	1	0	4	4	15	35	50	0	0	100
3	Professional Core courses	PCC-CE 304	Environmental Engineering	3	0	0	3	3	10	25	40	0	0	75
4		PEC-CE 301-305	Elective-I	3	0	0	3	3	10	25	40	0	0	75
5		PEC-CE 301-305	Elective-II	3	0	0	3	3	10	25	40	0	0	75
6	Professional Core courses	PCC-CE 305	Environmental Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
		PCC-CE 306	Transportation Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
7	Humanities and Social Sciences including Management courses	HSMC301 (OEL II)	Humanities I (Effective Technical Communication)	2	0	0	2	2	10	15	25	0	0	50
8	Project (Summer internship)	PROJ-CE 301	Minor Project/ Seminar/Summer Internship	0	0	2	2	1	0	0	0	25	25	50
TOTAL				20	1	6	27	24						675



Dr. Esar

VI SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part-1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P	P								
1	Professional Core courses	PCC-CE 307	Disaster Preparedness & Planning Management	3	0	0	0	3	3	10	25	40	0	0	75
		PCC-CE 308	Geotechnical Engineering	3	0	0	0	3	3	10	25	40	0	0	75
		PCC-CE 309	Engineering Economy, Estimation & Costing	3	0	0	0	3	3	10	25	40	0	0	75
2	Professional Elective courses	PEC-CE 306-310	Elective-III	3	0	0	0	3	3	10	25	40	0	0	75
3		PEC-CE 306-310	Elective-IV	3	0	0	0	3	3	10	25	40	0	0	75
4	Professional Core courses	PCC-CE 310	Geotechnical Engineering Lab	0	0	2	2	2	1	0	0	0	25	25	50
		PCC-CE 311	Transportation Engineering Lab-II	0	0	2	2	2	1	0	0	0	25	25	50
5	Open Elective courses	OEC	Open Elective III	3	0	0	0	3	3	10	25	40	0	0	75
		301 - 303													
6	Mandatory courses	MC-II	Essence of Indian Knowledge Tradition	2	0	0	0	2	0	0	0	0	0	0	0
7		Project	PROJ-CE 302	Project-II(Major Project)	0	0	10	10	10	5	0	0	125	125	250
TOTAL				20	0	14	34	25						800	



Dr. Ekan

VII SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks								
				L	T	P																
1	Professional Elective courses	PEC- CE401-405	Elective-V	3	0	0	3	3	10	25	40	0	0	75								
2		PEC- CE401-405	Elective-VI	3	0	0	3	3	10	25	40	0	0	75								
3	Open Elective courses	OEC	Open Elective IV	3	0	0	3	3	10	25	40	0	0	75								
4		OEC	Open Elective V	3	0	0	3	3	10	25	40	0	0	75								
5	Mandatory courses	MC-III	Constitution of India	2	0	0	2	0	0	0	0	0	0	0								
6	Project (Or Summer internship)	PROJ-CE 401	Short Term Training (21-45 Days)/ Project-III	0	0	6	6	3	0	0	0	0	150	150								
TOTAL													14	0	6	20	15					450



Dr. Sagar
Dr. Sagar

Sun 21/6/23



VIII SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	Project Report	Internal Evaluation	Industry Evaluation	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Project	PROJ-CE 402	Industrial Internship/Project-IV	0	0	20	20	10	100	300	0	0	500	
TOTAL				0	0	20	10	10					500	
Total Credits								163	Total Marks				5050	

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V. J. JAIN
DR. G. RAO



Code	Professional Elective Courses (PEC-CE)	Code	Open Elective Courses(OEC)
PEC-CE 301	Design of Concrete Structure-I	OEC-301	Soft Skills and Interpersonal Communication
PEC-CE 302	Construction Engineering Materials	OEC-302	ICT for Development
PEC-CE 303	Solid and Hazardous Waste Management	OEC-303	Human Resource Development and Organizational Behavior
PEC-CE 304	Rural Water Supply and Onsite Sanitation Systems	OEC-401	Cyber Law and Ethics
PEC-CE 305	Contracts Management	OEC-402	Introduction to Philosophical Thoughts
PEC-CE 306	Bridge Engineering	OEC-403	Comparative Study of Literature
PEC-CE 307	Railway Engineering	OEC-404	Indian Music System
PEC-CE 308	Intelligent Transportation Systems	OEC-405	History of Science & Engineering
PEC-CE 309	Port and Harbour Engineering	OEC-406	Introduction to Art and Aesthetics
PEC-CE 310	Hydraulic modelling		
PEC-CE 401	Design of Concrete Structure-II		
PEC-CE 402	Foundation Engineering		
PEC-CE 403	Structural Dynamics		
PEC-CE 404	Rock Mechanics		
PEC-CE 405	Traffic Engineering and Management		



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D. R. Gaur

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21/7/23



MEWAR UNIVERSITY, CHITTORGARH, RAJASTHAN

Scheme and Syllabus

For

B.TECH. (CSE)

DETAILED 4-YEAR CURRICULUM CONTENTS



Mewar University
Knowledge to wisdom

MEWAR UNIVERSITY, CHITTORGARH, RAJASTHAN



I SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC101	Physics	3	1	0	4	4	15	35	50	0	0	100
2		BSC102	Mathematics-I	3	1	0	4	4	15	35	50	0	0	100
3		BSC103	Chemistry	3	1	0	4	4	15	35	50	0	0	100
4		BSC104	Physics Lab	0	0	2	2	1	0	0	0	25	25	50
5		BSC105	Chemistry Lab	0	0	2	2	1	0	0	0	25	25	50
6	Engineering Science Courses	ESC101	Basic Electrical Engineering	3	1	0	4	4	15	35	50	0	0	100
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	2	0	0	0	50	50	100
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
TOTAL				12	4	10	26	21						650

II SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Basic Science	BSC106	Mathematics -II	3	1	0	4	4	15	35	50	0	0	100
2		ESC104	Programming for Problem Solving	3	1	0	4	4	15	35	50	0	0	100
3	Engineering Science Courses	ESC105	Engineering Mechanics	3	1	0	4	4	15	35	50	0	0	100
4		ESC106	Basic Electronics	3	1	0	4	4	15	35	50	0	0	100
5		ESC107	Programming for Problem Solving Lab	0	0	4	4	2	0	0	0	50	50	100
6		ESC108	Workshop Practices Lab	0	0	4	4	2	0	0	0	50	50	100
7	Humanities and Social Sciences including Mandatory courses	HSMC 101	English	2	0	0	2	2	10	15	25	0	0	50
8		HSMC 102	English Lab	0	0	2	2	1	0	0	0	25	25	50
9		MC-1	Environmental Science	2	0	0	2	0	0	0	0	0	0	0
TOTAL				16	4	10	30	23						700



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I SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
				TOTAL										
1	Basic Science course	BSC101	Physics	3	1	0	4	4	15	35	0	0	100	
2		BSC102	Mathematics-I	3	1	0	4	4	15	35	0	0	100	
3		BSC103	Chemistry	3	1	0	4	4	15	35	0	0	100	
4		BSC104	Physics Lab	0	0	2	2	1	0	0	0	25	25	50
5		BSC105	Chemistry Lab	0	0	2	2	1	0	0	0	25	25	50
6	Engineering Science Courses	ESC101	Basic Electrical Engineering	3	1	0	4	4	15	35	0	0	100	
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	2	0	0	50	50	100	
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	1	0	0	25	25	50	
TOTAL				12	4	10	26	21					650	

II SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
				TOTAL										
1	Basic Science	BSC106	Mathematics -II	3	1	0	4	4	15	35	0	0	100	
2		ESC104	Programming for Problem Solving	3	1	0	4	4	15	35	0	0	100	
3	Engineering Science Courses	ESC105	Engineering Mechanics	3	1	0	4	4	15	35	0	0	100	
4		ESC106	Basic Electronics	3	1	0	4	4	15	35	0	0	100	
5		ESC107	Programming for Problem Solving Lab	0	0	4	4	2	0	0	50	50	100	
6		ESC108	Workshop Practices Lab	0	0	4	4	2	0	0	50	50	100	
7	Humanities and Social Sciences including Mandatory courses	HSMC 101	English	2	0	0	2	2	10	15	0	0	50	
8		HSMC 102	English Lab	0	0	2	2	1	0	0	25	25	50	
9	Mandatory courses	MC-1	Environmental Science	2	0	0	2	0	0	0	0	0	0	
TOTAL				16	4	10	30	23					700	



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III SEMESTER														
S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC- CS301	Data Structure and Algorithms	3	1	0	4	4	15	35	50	0	0	100
2		PCC- CS302	Computer Organization and Architecture	3	1	0	4	4	15	35	50	0	0	100
3		PCC- CS303	Computer Network	3	1	0	4	4	15	35	50	0	0	100
4		PCC- CS304	Digital Electronics	3	1	0	4	4	15	35	50	0	0	100
5		PCC- CS305	Data Structure and Algorithms Lab	0	0	2	2	2	1	0	0	25	25	50
6		PCC- CS306	Digital Electronics Lab	0	0	2	2	2	1	0	0	25	25	50
7	Basic Science course	BSC107	Mathematics-III	3	1	0	4	4	15	35	50	0	0	100
8		BSC108	Biology for Engineers	2	0	0	2	2	10	15	25	0	0	50
9	Humanities and Social Sciences including Management courses	HISM201	Organizational Behavior	3	0	0	3	3	10	25	40	0	0	75
TOTAL				20	5	4	29	27						725

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IV SEMESTER														
S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC- CS 401	Object Oriented Programming	3	1	0	4	4	15	35	50	0	0	100
2		PCC- CS 402	Operating System	3	0	0	3	3	15	35	50	0	0	100
3		PCC- CS 403	Design and Analysis of Algorithms	3	1	0	4	4	15	35	50	0	0	100
4		PCC- CS 404	Web Design and Applications	3	1	0	4	4	15	35	50	0	0	100
5		PCC- CS 405	Discrete Mathematics	3	1	0	4	4	15	35	50	0	0	100
6		PCC- CS 406	Object Oriented Programming Lab	0	0	2	2	1	0	0	0	25	25	50
7		PCC- CS 407	Design and Analysis of Algorithms Lab	0	0	2	2	1	0	0	0	25	25	50
		PCC- CS 408	Web Design and Applications Lab	0	0	2	2	1	0	0	0	25	25	50
8		PCC- CS 409	Operating System Windows Core lab/Unix Shell Programming	0	0	1	2	1	0	0	0	25	25	50
9	Humanities and Social Sciences including Management	H-102	Universal Human Values 2: Understanding Harmony	3	0	0	3	3	10	25	40	0	0	75
TOTAL				18	4	7	30	26						775

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V SEMESTER														
S.N a.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC- CS 501	Database Management Systems	3	1	0	4	4	15	35	50	0	0	100
2		PCC CS 502	Automata Theory	4	0	0	4	4	15	35	50	0	0	100
3		PCC CS503	Software Engineering	3	1	0	4	4	15	35	50	0	0	100
4	Professional Elective courses	PEC CSEL 504- 508	Elective-I	3	0	0	3	3	10	25	40	0	0	75
5		PEC CSEL 509- 513	Elective-II	3	0	0	3	3	10	25	40	0	0	75
6	Professional Core courses	PCC CS 514	Database Management Systems Lab	0	0	2	2	1	0	0	0	25	25	50
7		PCC CS 515	Software Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
8	Humanities and Social Sciences including Management courses	HSMC301 (OEL II)	Humanities I (Effective Technical Communication)	2	0	0	2	2	10	15	25	0	0	50
9	Project (Summer internship)	PROJ- CS 301	Minor Project/ Seminar/Summer Internship	0	0	2	2	1	0	0	0	25	25	50
TOTAL				18	2	6	26	23						650

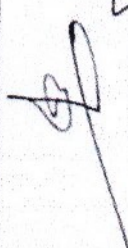
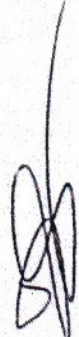

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VI SEMESTER

S.N	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 /Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC-CS 601	3	1	0	4	4	15	35	50	0	0	100	
		PCC-CS 602	3	1	0	4	4	15	35	50	0	0	100	
2	Professional Elective courses	PEC CSEL603-607	3	0	0	3	3	10	25	40	0	0	75	
3		PEC CSEL608-612	3	0	0	3	3	10	25	40	0	0	75	
4	Open Elective courses	OEC 601-605	3	0	0	3	3	10	25	40	0	0	75	
5	Professional Core courses	PCC CS 613	0	0	2	2	1	0	0	0	25	25	50	
6		PCC CS 614	0	0	2	2	1	0	0	0	25	25	50	
7	Mandatory courses	MC-II	2	0	0	2	0	0	0	0	0	0	0	
8	Project	PROJ-CS 601	0	0	8	8	4	0	0	0	100	100	200	
TOTAL				17	2	12	31	23					725	



VII SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Elective courses	PEC CSEL701- 705	Elective-V	3	0	0	3	3	10	25	40	0	0	75
2		PEC CSEL706- 710		Elective-VI	3	0	0	3	3	10	25	40	0	0
3	Open Elective courses	OEC- 701- 705	Open Elective II	3	0	0	3	3	10	25	40	0	0	75
4		OEC- 706- 710	Open Elective III	3	0	0	3	3	10	25	40	0	0	75
5	Mandatory courses	MC-III	Constitution of India	2	0	0	2	0	0	0	0	0	0	0
6	Project (Or Summer internship)	PROJ CS 701	Short Term Training (21-45 Days) Project- III	0	0	6	6	3	0	0	0	0	150	150
TOTAL				14	0	6	20	15						450

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MEWAR UNIVERSITY															
REVISED SYLLABUS EFFECTIVE FROM 2021-22															
COURSE: B.Tech BRANCH: Electronics and Communication Engineering															
ISEMESTER															
S.No.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P									
1	Basic Science course	BSC101	Physics	3	1	0	4	4	15	35	50	0	0	100	
2		BSC102	Mathematics-I	3	1	0	4	4	15	35	50	0	0	100	
3		BSC103	Chemistry	3	1	0	4	4	15	35	50	0	0	100	
4		BSC104	Physics Lab	0	0	2	2	1	0	0	0	25	25	50	
5		BSC105	Chemistry Lab	0	0	2	2	1	0	0	0	25	25	50	
6	Engineering Science Courses	ESC101	Basic Electrical Engineering	3	1	0	4	4	15	35	50	0	0	100	
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	2	0	0	0	50	50	100	
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	1	0	0	0	25	25	50	
TOTAL				12	4	10	26	21						650	



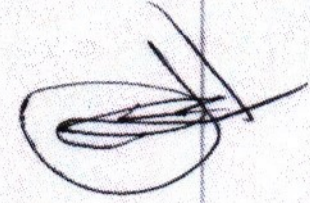
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II SEMESTER															
S.No.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P									
1	Basic Science course	BSC106	Mathematics -II	3	1	0	4	4	15	35	50	0	0	100	
2	Engineering Science Courses	ESC104	Programming for Problem Solving	3	1	0	4	4	15	35	50	0	0	100	
3		ESC105	Engineering Mechanics	3	1	0	4	4	15	35	50	0	0	100	
4		ESC106	Basic Electronics	3	1	0	4	4	15	35	50	0	0	100	
5		ESC107	Programming for Problem Solving Lab	0	0	4	4	2	0	0	0	50	50	100	
6		Workshop Practices Lab	ESC108	Workshop Practices Lab	0	0	4	4	2	0	0	0	50	50	100
7	Humanities and Social Sciences including Mandatory courses	HSMC 101	English	2	0	0	2	2	10	15	25	0	0	50	
8		HSMC 102	English Lab	0	0	2	2	1	0	0	0	25	25	50	
9		MC-1	Environmental Science	2	0	0	2	0	0	0	0	0	0	0	
TOTAL				16	4	10	30	23						700	

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III SEMESTER															
S.No.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P	P								
1	Basic Science course	BSC107	Mathematics III (PDE, Probability & Statistics)	3	1	0	4	4	15	35	50	0	0	100	
2		BSC108	Biology for Engineers	2	0	0	2	2	10	15	25	0	0	50	
3	Professional Core courses	EC301	Electronic Devices	3	1	0	4	4	15	35	50	0	0	100	
4		EC302	Digital System Design	3	1	0	4	4	15	35	50	0	0	100	
5		EC303	Data Structure and Algorithm	3	1	0	4	4	15	35	50	0	0	100	
6		EC304	Network Theory	3	1	0	4	4	15	35	50	0	0	100	
7		EC305	Electronic Devices Lab	0	0	2	2	1	0	0	0	35	40	50	
8		EC306	Digital System Design Lab	0	0	2	2	1	0	0	0	0	35	40	50
9	Humanities and Social Sciences including Management courses	HSMC201	Organizational Behavior	3	0	0	3	3	10	25	40	0	0	75	
TOTAL				20	5	4	29	27						725	



IV SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva-Voice	Internal Practical	End Term Practical	Total Marks
				L	T	P									
1	Professional Core courses	EC401	Analog and Digital Communication	3	1	0	4	4	15	35	50	0	0	100	
2		EC402	Analog Circuits	3	1	0	4	4	15	35	50	0	0	100	
3		EC403	Microcontrollers	3	1	0	4	4	15	35	50	0	0	100	
4		EC404	Signals and Systems	3	1	0	4	4	15	35	50	0	0	100	
5		EC405	Electronic Measurement and Instrumentation	3	1	0	4	4	15	35	50	0	0	100	
6		EC404	Analog and Digital Communication Lab	0	0	2	2	2	0	0	0	25	25	50	
7		EC405	Analog Circuits Lab	0	0	2	2	2	0	0	0	25	25	50	
8		EC406	Microcontrollers Lab	0	0	2	2	2	0	0	0	25	25	50	
9		EC407	Electronic Measurement and Instrumentation Lab	0	0	2	2	2	0	0	0	25	25	50	
10	Humanities and Social Sciences including Management	H-102	Universal Human Values 2: Understanding Harmony	3	0	0	3	3	10	25	40	0	0	75	
TOTAL				18	5	8	31	27						775	

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V SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voice	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	EC501	Electromagnetic Waves	3	1	0	4	4	15	35	50	0	0	100
2		EC502	Digital Signal Processing	4	0	0	4	4	15	35	50	0	0	100
3		EC503	Computer Architecture	3	1	0	4	4	15	35	50	0	0	100
4	Professional Elective	EC804	Digital Signal Processing Lab -	0	0	2	2	1	0	0	0	25	25	50
5		ECEL521	Elective-I	3	0	0	3	3	10	25	40	0	0	75
6		ECEL522	Elective-II	3	0	0	3	3	10	25	40	0	0	75
7	Humanities and Social Sciences including Management courses	HSMC301 (OEC II)	Humanities I (Effective Technical Communication)	2	0	0	2	2	10	15	25	0	0	50
8	Project (Summer internship)	PROJ-ECE 501	Minor Project/Seminar/Summer Internship	0	0	2	2	1	0	0	0	25	25	50
TOTAL				18	2	4	24	22						600



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WISEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional	EC601	Control System	3	0	0	3	10	25	40	0	0	75	
2	Core courses	EC602	Computer Network	0	0	2	2	0	0	0	25	25	50	
3	Professional	EC621	Elective-III	3	0	0	3	10	25	40	0	0	75	
4	Elective	EC622	Elective-IV	3	0	0	3	10	25	40	0	0	75	
5	Open Elective courses -	ECOEC-601	Open Elective-I	3	0	0	3	10	25	40	0	0	75	
6	Mandatory courses	MC-II	Essence of Indian Knowledge Tradition	2	0	0	2	0	0	0	0	0	0	
7	Project	PROJ-EC 601	Project-III (Major Project)	0	0	10	10	5	0	0	125	125	250	
TOTAL				14	0	12	26	18					600	



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VII SEMESTER														
S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Elective	ECEL721	Elective-V	3	0	0	3	3	10	25	40	0	0	75
2		ECEL722	Elective-VI	3	0	0	3	3	10	25	40	0	0	75
3	Open Elective courses	ECOEC-602	Open Elective II	3	0	0	3	3	10	25	40	0	0	75
4		ECOEC-603	Open Elective III	3	0	0	3	3	10	25	40	0	0	75
5	Mandatory courses	MC-III	Constitution of India	2	0	0	2	0	0	0	0	0	0	0
6	Project (Or Summer internship)	PROJ-EC 701	Short Term Training (21-45 Days) Project-II	0	0	6	6	3	0	0	0	0	150	150
TOTAL				14	0	6	20	15						450



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VIII SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	Project Report	Internal Evaluation	Industry Evaluation	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Project	PROJ-ECE 402	Industrial Internship/Project-IV	0	0	20	20	10	100	300	0	0	500	
TOTAL													163	5000

Sr. No.	Course Code	Course Name	Course Category
1	ECOEC601	Renewable Energy	Open Elective-I
2		Internet of Things	
3		Energy Efficiency and Audit	
4	ECOEC602	Electronics in Agriculture	Open Elective-II
5		Robotics	
6		Disaster Management	
7	ECOEC603	Entrepreneurship	Open Elective-III
8		Artificial Intelligence	
9		Introduction to E-governance	

Sr. No.	Category	Course Code	Course Name
1	Professional Elective-I	ECELS21	Power Electronics
2			Embedded System
3	Professional Elective-II	ECELS22	Bio-Medical Electronics
4			Linear Integrated Circuit
5	Professional Elective-III	ECELS21	Fiber Optic Communications
6			Microwave Theory and Techniques
7	Professional Elective-IV	ECELS22	Introduction to MEMS
8			VLSI Devices and Design
9	Professional Elective-V	ECELS21	Digital Design using VHDL
10			Mobile Communication and Networks
11	Professional Elective-VI	ECELS22	Digital Image Processing
12			Satellite Communications

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MEWAR UNIVERSITY

REVISED SYLLABUS EFFECTIVE FROM 2021-22
 COURSE: B.Tech BRANCH: Electrical Engineering

I SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P									
1	Basic Science course	BSC101	Physics	3	1	0	4	4	15	35	50	0	0	100	
2		BSC102	Mathematics-I	3	1	0	4	4	15	35	50	0	0	100	
3		BSC103	Chemistry	3	1	0	4	4	15	35	50	0	0	100	
4		BSC104	Physics Lab	0	0	2	2	1	0	0	0	25	25	50	
5		BSC105	Chemistry Lab	0	0	2	2	1	0	0	0	25	25	50	
6	Engineering Science Courses	ESC101	Basic Electrical Engineering	3	1	0	4	4	15	35	50	0	0	100	
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	2	0	0	0	50	50	100	
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	1	0	0	0	25	25	50	
TOTAL				12	4	10	26	21						650	

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II SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC106	Mathematics -II	3	1	0	4	4	15	35	50	0	0	100
2		ESC104	Programming for Problem Solving	3	1	0	4	4	15	35	50	0	0	100
3	Engineering Science Courses	ESC105	Engineering Mechanics	3	1	0	4	4	15	35	50	0	0	100
4		ESC106	Basic Electronics	3	1	0	4	4	15	35	50	0	0	100
5		ESC107	Programming for Problem Solving Lab	0	0	4	4	4	2	0	0	50	50	100
6	Programmes and Social Sciences including Management Mandatory courses	ESC108	Workshop Practices Lab	0	0	4	4	4	2	0	0	50	50	100
7		HSMC 101	English	2	0	0	2	2	10	15	25	0	0	50
8		HSMC 102	English Lab	0	0	2	2	2	1	0	0	25	25	50
9		MC-1	Environmental Science	2	0	0	2	2	0	0	0	0	0	0
TOTAL				16	4	10	30	23						700

(Deepak Kumar Joshi)



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III SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC107	Mathematics-III	3	1	0	4	4	15	35	50	0	0	100
2		BSC108	Biology for Engineers	2	0	0	2	2	10	15	25	0	0	50
3	Professional Core courses	PCC-EE201	Electrical Machines - 1	3	1	0	4	4	15	35	50	0	0	100
4		PCC-EE202	Analog Electronics	3	1	0	4	4	15	35	50	0	0	100
5		PCC-EE203	Electrical Circuit	3	1	0	4	4	15	35	50	0	0	100
6		PCC-EE204	Generation of Electrical Power	3	1	0	4	4	15	35	50	0	0	100
7		PCC-EE205	Electrical Machines Laboratory - I	0	0	2	2	1	0	0	0	25	25	50
8	Humanities and Social Sciences including Management courses	PCC-EE206	Analog Electronics & Electrical Circuit Laboratory	0	0	2	2	1	0	0	0	25	25	50
9		HSMC201	Organizational Behavior	3	0	0	3	3	10	25	40	0	0	75
TOTAL				20	5	4	29	27						725

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IV SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks									
				L	T	P																	
1	Professional Core courses	PCC-EE 207	Digital Electronics	3	1	0	4	4	15	35	50	0	0	100									
2		PCC-EE 208	Electrical Machines - II	3	1	0	4	4	15	35	50	0	0	100									
3		PCC-EE 209	Electrical Measurement & measuring Instrument	3	1	0	4	4	15	35	50	0	0	100									
4		PCC-EE 210	Electromagnetic Field Theory	3	1	0	4	4	15	35	50	0	0	100									
5		PCC-EE 211	Signal & System	3	1	0	4	4	15	35	50	0	0	100									
6		PCC-EE 212	Digital Electronics Lab	0	0	2	2	1	0	0	0	25	25	50									
7		PCC-EE 213	Electrical Machines Lab- II	0	0	4	4	2	0	0	0	50	50	100									
8		PCC-EE 214	Electrical Measurement & measuring Instrument Lab	0	0	2	2	1	0	0	0	25	25	50									
9	Humanities and Social Sciences including Management	HI-102	Universal Human Values 2: Understanding Harmony	3	0	0	3	3	10	25	40	0	0	75									
TOTAL													18	5	8	31	27						775

Deepak Kumar Joshi



V SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC-EE- 301	Control Systems	3	1	0	4	4	15	35	50	0	0	100
2		PCC EE 302	Microprocessors	4	0	0	4	4	15	35	50	0	0	100
3		PCC EE 303	Power System-I (Apparatus and Modelling)	3	1	0	4	4	15	35	50	0	0	100
4	Professional Elective courses	PEC EEL301 - 305	Elective-I	3	0	0	3	3	10	25	40	0	0	75
5			Elective-II	3	0	0	3	3	10	25	40	0	0	75
6	Professional Core courses	PCC EE 304	Power & Control Systems Lab	0	0	2	2	1	0	0	0	25	25	50
7	Humanities and Social Sciences including Management courses	HSMC301 (OEL II)	Humanities I (Effective Technical Communication)	2	0	0	2	2	10	15	25	0	0	50
8	Project (Summer internship)	PROJ-EE 301	Minor Project/ Seminar/Summer Internship	0	0	2	2	1	0	0	0	25	25	50
TOTAL				18	2	4	24	22						600



VI SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC-EE 305	Power Electronics	3	0	0	3	3	10	25	40	0	0	75
		PCC-EE 306	Power Electronics Lab	0	0	2	2	1	0	0	0	25	25	50
2	Professional Elective courses	PEC EEL306- 310	Elective-III	3	0	0	3	3	10	25	40	0	0	75
3			Elective-IV	3	0	0	3	3	10	25	40	0	0	75
4	Open Elective courses	OEC 301-303	Open Elective-I	3	0	0	3	3	10	25	40	0	0	75
5	Mandatory courses	MC-II	Essence of Indian Knowledge Tradition	2	0	0	2	0	0	0	0	0	0	0
6	Project	PROJ-EE 302	Project-II(Major Project)	0	0	10	10	5	0	0	0	125	125	250
TOTAL				14	0	12	26	18						600

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(Deepak Kumar Joshi)



21/6/23

VII SEMESTER														
S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Elective courses	PEC EEI-401-409	Elective-V	3	0	0	3	3	10	25	40	0	0	75
2			Elective-VI	3	0	0	3	3	10	25	40	0	0	75
3	Open Elective courses	OEC 401-403	Open Elective II	3	0	0	3	3	10	25	40	0	0	75
4		OEC 404-406	Open Elective III	3	0	0	3	3	10	25	40	0	0	75
5	Mandatory courses	MC-III	Constitution of India	2	0	0	2	0	0	0	0	0	0	0
6	Project (Or Summer internship)	PROJ EE 401	Short Term Training (21-45 Days)/ Project-III	0	0	6	6	3	0	0	0	0	150	150
TOTAL				14	0	6	20	15						450

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(Deepak Kumar Joshi)



VIII SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	Project Report	Internal Evaluation	Industry Evaluation	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Project	PROJ-EE-402	Industrial Internship/Project-IV	0	0	20	20	10	100	300	0	0	500	
TOTAL														
163														
5000														

Professional Elective courses (19)

- PEC EEL 301 Wind and Solar Energy Systems
- PEC EEL 302 Line-Commutated and Active PWM Rectifiers
- PEC EEL 303 Electrical Drives
- PEC EEL 304 Electrical and Hybrid Vehicles
- PEC EEL 305 Electrical Machine Design
- PEC EEL 306 Power System-II
- PEC EEL 307 Power System Protection
- PEC EEL 308 HVDC Transmission Systems
- PEC EEL 309 Power Quality and FACTS
- PEC EEL 310 High Voltage Engineering
- PEC EEL 401 Industrial Electrical Systems
- PEC EEL 402 Power System Dynamics and Control
- PEC EEL 403 Digital Control Systems
- PEC EEL 404 Computer Architecture
- PEC EEL 405 Electromagnetic waves
- PEC EEL 406 Computational Electromagnetics
- PEC EEL 407 Control Systems Design

Open Elective Courses (9)

- OEC 301 Soft Skills and Interpersonal Communication
- OEC 302 ICT for Development
- OEC 303 Human Resource Development and Organizational Behavior
- OEC 401 Cyber Law and Ethics
- OEC 402 Introduction to Philosophical Thoughts
- OEC 403 Comparative Study of Literature
- OEC 404 Indian Music System
- OEC 405 History of Science & Engineering
- OEC 406 Introduction to Art and Aesthetics

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 (Deepak Kumar Joshi)

PEC | EL 408 Electrical Energy Conservation and Auditing

PEC | EL 409 Advanced Electric Drives

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(Deepak Kumar Joshi)



21/6/23



MEWAR UNIVERSITY

REVISED SYLLABUS EFFECTIVE

COURSE BRANCH: B.Tech.Electrical & Electronics Engineering (EEE) I SEMESTER

Sr. No	Course Code	Course Title	Contact hours per Week			Subject Credit	TA	End Term Part I	End Term Viva- Voce	Internal Practical	End Term Practical	Total Marks
			L	T	P							
1	BS-101	Engineering Physics-I	3	1	-	4	15	35	50			100
2	BS-103	Engineering Mathematics-I	3	1	-	4	15	35	50			100
3	BS-105	Engineering Chemistry	3	1	-	4	15	35	50			100
4	ES-101	Engineering Graphics & Drawing	-	-	4	2	20	30	50			100
5	ES-103	Fundamentals of Computers and Programming	3	1	-	4	15	35	50			100
6	ES-105	Basics of Electrical Engineering/ Basics of Electronics Engineering	3	1	-	4	15	35	50			100
7	BS-107	Physics Lab-I	-	-	2	1				25	25	50
8	BS-109	Chemistry Lab	-	-	2	1				25	25	50
9	ES-107	Computer Lab	-	-	2	1				25	25	50
10	ES-109	Electrical/ Electronics Engineering Lab	-	-	2	1				25	25	50
11	ES-111	Workshop Practices-I	-	-	2	1				25	25	50
12	ELGA-101	English Language and General Awareness-I	1	-	-	1	-	-	25			25
TOTAL						28						875

II SEMESTER

Sr. No	Course Code	Course Title	Contact hours per Week			Subject Credit	TA	End Term Part I	End Term Viva- Voce	Internal Practical	End Term Practical	Total Marks
			L	T	P							
1	BS-102	Engineering Physics-II	3	1	-	4	15	35	50			100
2	BS-104	Engineering Mathematics-II	3	1	-	4	15	35	50			100
3	ES-102	Introduction to Environmental Sciences	3	1	-	4	15	35	50			100
4	ES-106	Basics of Electronics Engineering/Basics of Electrical Engineering	3	1	-	4	15	35	50			100
5	ES-108	Basics of Mechanical Engineering	3	1	-	4	15	35	50			100
6	BS-108	Physics Lab-II	-	-	2	1	10			15	25	50
7	ES-110	Electronics / Electrical Engineering Lab	-	-	2	1	10			15	25	50
8	ES-112	Workshop Practice-II	-	-	2	1	10			15	25	50
9	ES-114	CAD Lab	-	-	4	2	20			30	50	100
10	HS-102	Language Lab	-	-	2	1	10			15	25	50
11	ELGA-102	English Language and General Awareness-II	1	-	-	1	-	-	25			25
TOTAL						27						825


 (Deepak Kumar Joshi)



III SEMESTER												
Sr. No	Course Code	Course Title	Contact hours per Week			Subject Credit	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
			L	T	P							
1	EEE-201	Electrical Machines-I	3	1	4	15	35	50			100	
2	EEE-203	Circuits and Networks	3	1	4	15	35	50			100	
3	EEE-205	Electrical Measurements and Measuring Instruments	4		4	15	35	50			100	
4	EEE-207	Power Generation, Operation and Control	3	1	4	15	35	50			100	
5	EEE-209	Electronic Devices and Circuits	3	1	4	15	35	50			100	
6	HS-201	Essentials of Management and Organizational Behavior	3	1	4	15	35	50	25	25	50	
7	EEE-211	Electrical Machine Lab-I			2				25	25	50	
8	EEE-213	Electrical Circuit Theory Lab			2				25	25	50	
9	EEE-215	Measurements and Instrumentation Lab			2				25	25	50	
10	EEE-217	Electronics Devices Lab			2				25	25	50	
11	ELGA-201	English Language and General Awareness-III	1		1			25			25	
TOTAL						29					825	

IV SEMESTER												
Sr. No	Course Code	Course Title	Contact hours per Week			Subject Credit	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
			L	T	P							
1	EEE-202	Electrical Machine-II	3	1	4	15	35	50			100	
2	EEE-204	Transmission and Distribution	4		4	15	35	50			100	
3	EEE-206	Signal and Systems	3	1	4	15	35	50			100	
4	EEE-208	Digital Circuits	3	1	4	15	35	50			100	
5	EEE-210	Control Systems	3	1	4	15	35	50			100	
6	HS-202	Fundamentals of Business & Economics	3	1	4	15	35	50	25	25	50	
7	EEE-212	Electrical Machines Lab -II			2				25	25	50	
8	EEE-214	Signal and Systems Lab			2				25	25	50	
9	EEE-216	Digital Circuits Lab			2				25	25	50	
	EEE-218	Control Systems Lab			2				25	25	50	
10	ELGA-202	English Language and General Awareness-IV	1		1			25			25	
TOTAL						29					825	

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Sr. No	Course Code	Course Title	Contact hours per Week			Subject Credit	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
			L	T	P							
1	EEE-301	Electromagnetic Field Theory	3	1		4	15	35	50			100
2	EEE-303	Power Electronics	3	1		4	15	35	50			100
3	EEE-305	Power Systems Analysis	3	1		4	15	35	50			100
4	EEE-307	Engineering Material Science	4			4	15	35	50			100
5	EEE-309	Principles of Communications	3	1		4	15	35	50			100
6	EEE-311	Microprocessors and Microcontrollers	3	1		4	15	35	50			100
7	EEE-313	Power Systems Lab			2	1				25	25	50
8	EEE-315	Power Electronics Lab			2	1				25	25	50
9	EEE-317	Microprocessor and Microcontroller Lab			2	1				25	25	50
10	EEE-319	Design Project			2	1				25	25	50
11	ELGA-301	English Language and General Awareness-V	1			1			25			25
TOTAL						29						825

VI SEMESTER

Sr. No	Course Code	Course Title	Contact hours per Week			Subject Credit	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
			L	T	P							
1	EEE-302	Switchgear and Protection	3	1		4	15	35	50			100
2	EEE-304	Computers Methods in Power Systems	3	1		4	15	35	50			100
3	EEE-306	Embedded System Design	3	1		4	15	35	50			100
4	EEE-308	Digital Signal Processing	3	1		4	15	35	50			100
5	EEE-310	Digital Design using VHDL	3	1		4	15	35	50			100
6	EEE-312	Electric Drives	3	1		4	15	35	50			100
7	EEE-314	Computers Applications in Power Systems -Lab			2	1				25	25	50
8	EEE-316	Embedded System Lab			2	1				25	25	50
9	EEE-318	VHDL Lab			2	1				25	25	50
10	EEE-320	UG Seminar			2	1				25	25	50
11	ELGA-302	English Language and General Awareness-VI	1			1			25			25
TOTAL						29						825

Sumit



(Deepak Kumar Joshi)

VII SEMESTER												
Sr. No	Course Code	Course Title	Contact hours per Week			Subject Credit	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practical	End Term Practical	Total Marks
			L	T	P							
1	EEE-421	Department Elective-I	3	1		4	15	35				100
2	EEE-422	Department Elective-II	3	1		4	15	35				100
3	EEE-423	Department Elective-III	3	1		4	15	35				100
4	EEE-424	Department Elective-IV	3	1		4	15	35				100
5	OE-431	Open Elective-I	3			3		25				75
6	OE-432	Open Elective-II	3			3		25				75
7	IT-001	Industrial Training (21-45 Days)				6						150
TOTAL						28						700

VIII SEMESTER												
Sr. No	Course Code	Course Title	Contact hours per Week			Subject Credit	Teachers Evaluation	Assessment/ Lab Record	External Examination/Viva- Voce	Internal Practical	End Term Practical	Total Marks
			L	T	P							
1	EEE-441/442	Industrial Training/Project				20	100	150				500
2	EEE-450	Comprehensive Academic and General Proficiency Viva-Voce				2		50				50
TOTAL						22						550

LIST OF DEPARTMENTAL ELECTIVES	
Artificial Intelligence Technique	Power Systems Restructuring and Power Management
Mechatronics	Power Quality
High Voltage Engineering	Digital Communication
Utilization of Electrical Energy	VLSI Devices and Design
Electromagnetic Interference and Compatibility	Wireless Communication
Introduction to MEMS	Biomedical Instrumentation
Non-conventional Energy Conversion Systems	Computer Communication
Non-linear and Digital Control Systems	Information Theory and Coding
High Voltage DC Transmission	
LIST OF OPEN ELECTIVES	
Remote Sensing and GIS	Quality Control And Reliability
Management Information Systems	Numerical Analysis And Optimization Techniques
Advanced Engineering Mathematics	Security In Computing
Advanced Communications	Entrepreneurship
Environmental Assessment And Modeling	Operations Management

2/16/23



(Deepak Kumar Joshi)

MEWAR UNIVERSITY
REVISED SYLLABUS EFFECTIVE FROM 2021-22
COURSE: B.Tech BRANCH: Mechanical Engineering

I SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva- Voce	Internal Practical I	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC101	Physics	3	1	0	4	4	15	35	50	0	0	100
2		BSC102	Mathematics-I	3	1	0	4	4	15	35	50	0	0	100
3		BSC103	Chemistry	3	1	0	4	4	15	35	50	0	0	100
4		BSC104	Physics Lab	0	0	2	2	1	0	0	0	25	25	50
5	Engineering Science Courses	BSC105	Chemistry Lab	0	0	2	2	1	0	0	0	25	25	50
6		ESC101	Basic Electrical Engineering	3	1	0	4	4	15	35	50	0	0	100
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	2	0	0	0	50	50	100
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
TOTAL				12	4	10	26	21						650

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(Dinesh K)

II SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part 1	End Term Part 2/ Viva- Voce	Internal Practical 1	End Term Practical	Total Marks
				L	T	P	P								
1	Basic Science	BSCI06	Mathematics -II	3	1	0	4	4	15	35	50	0	0	100	
2	Engineering Science Courses	ESCI04	Programming for Problem Solving	3	1	0	4	4	15	35	50	0	0	100	
3		ESCI05	Engineering Mechanics	3	1	0	4	4	15	35	50	0	0	100	
4		ESCI06	Basic Electronics	3	1	0	4	4	15	35	50	0	0	100	
5		ESCI07	Programming for Problem Solving Lab	0	0	4	4	2	0	0	0	50	50	100	
6	Humanities and Social Sciences including Mandatory courses	ESCI08	Workshop Practices Lab	0	0	4	4	2	0	0	0	50	50	100	
7		HSMC 101	English	2	0	0	2	2	10	15	25	0	0	50	
8		HSMC 102	English Lab	0	0	2	2	1	0	0	0	25	25	50	
9		MC-1	Environmental Science	2	0	0	2	0	0	0	0	0	0	0	
TOTAL				16	4	10	30	23						700	

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III SEMESTER														
S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practica I	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC107	Mathematics-III	3	1	0	4	4	15	35	50	0	0	100
2		BSC108	Biology for Engineers	2	0	0	2	2	10	15	25	0	0	50
3	Professional Core courses	PCC-ME201	Thermodynamics	3	1	0	4	4	15	35	50	0	0	100
4		PCC-ME202	Strength of Materials	3	1	0	4	4	15	35	50	0	0	100
5		PCC-ME203	Materials Engineering	3	1	0	4	4	15	35	50	0	0	100
6		PCC-ME204	Fluid Mechanics & Fluid Machines	3	1	0	4	4	15	35	50	0	0	100
7		PCC-ME205	Strength of Materials Lab Fluid Mechanics & Fluid Machines Lab	0	0	2	2	1	0	0	0	25	25	50
8	Humanities and Social Sciences including Management courses	PCC-ME206		0	0	2	2	1	0	0	0	25	25	50
9		HSMC201	Organizational Behavior	3	0	0	3	3	10	25	40	0	0	75
TOTAL				20	5	4	29	27						725

Sumit



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IV SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practica 1	End Term Practical	Total Marks
				L	T	P								
1	Professional Core courses	PCC- ME 207	Applied Thermodynamics	3	1	0	4	4	15	35	50	0	0	100
2		PCC- ME 208	Instrumentation & Control	3	1	0	4	4	15	35	50	0	0	100
3		PCC- ME 209	Solid Mechanics	3	1	0	4	4	15	35	50	0	0	100
4		PCC- ME 210	Manufacturing Processes	3	1	0	4	4	15	35	50	0	0	100
5		PCC- ME 211	Kinematics & Theory of Machines	3	1	0	4	4	15	35	50	0	0	100
6		PCC- ME 212	Instrumentation & Control Lab	0	0	2	2	1	0	0	0	25	25	50
7		PCC- ME 213	Manufacturing Processes Lab	0	0	4	4	2	0	0	0	50	50	100
8		PCC- ME 214	Kinematics & Theory of Machines Lab	0	0	2	2	1	0	0	0	25	25	50
9	Humanities and Social Sciences including Management	H-102	Universal Human Values 2: Understanding Harmony	3	0	0	3	3	10	25	40	0	0	75
TOTAL													775	

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C. Dinesh Kumar

V SEMESTER															
S.N o.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part I	End Term Part 2 / Viva- Voce	Internal Practica I	End Term Practical	Total Marks
				L	T	P									
1	Professional Core courses	PCC- ME 301	Heat Transfer	3	1	0	4	4	15	35	50	0	0	100	
2		PCC ME 302	Manufacturing Technology	4	0	0	4	4	15	35	50	0	0	100	
3		PCC ME 303	Design of Machine Elements	3	1	0	4	4	15	35	50	0	0	100	
4	Professional Elective courses	PEC MEL301	Elective-I	3	0	0	3	3	10	25	40	0	0	75	
5		- 305	Elective-II	3	0	0	3	3	10	25	40	0	0	75	
6	Professional Core courses	PCC ME 304	Heat Transfer Lab	0	0	2	2	1	0	0	0	25	25	50	
7	Humanities and Social Sciences including Management courses	HSMC301 (OEL II)	Humanities I (Effective Technical Communication)	2	0	0	2	2	10	15	25	0	0	50	
8	Project (Summer internship)	PROJ- ME 301	Minor Project/ Seminar/Summer Internship	0	0	2	2	1	0	0	0	25	25	50	
TOTAL				18	2	4	24	22						600	

Signature



(Dinesh K)

VI SEMESTER															
S.N o.	Category	Course Code	Course Title	Contact hours per Week				Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practica I	End Term Practical	Total Marks
				L	T	P									
1	Professional Core courses	PCC- ME 306	Automation in Manufacturing	3	0	0	3	3	10	25	40	0	0	75	
		PCC- ME 307	Automation in Manufacturing Lab	0	0	2	2	1	0	0	0	25	25	50	
2	Professional Elective courses	PEC MEL306- 310	Elective-III	3	0	0	3	3	10	25	40	0	0	75	
			Elective-IV	3	0	0	3	3	10	25	40	0	0	75	
4	Open Elective courses	OEC 301-303	Open Elective-I	3	0	0	3	3	10	25	40	0	0	75	
5	Mandatory courses	MC-II	Essence of Indian Knowledge Tradition	2	0	0	2	0	0	0	0	0	0	0	
			Project-II(Major Project)	0	0	10	10	5	0	0	0	125	125	250	
TOTAL				14	0	12	26	18					600		

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C. Dinesh Kumar

VII SEMESTER

S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voice	Internal Practical I	End Term Practical	Total Marks
				L	T	P								
1	Professional Elective courses	PEC MEL401-405	Elective-V	3	0	0	3	3	10	25	40	0	0	75
2			Elective-VI	3	0	0	3	3	10	25	40	0	0	75
3	Open Elective courses	OEC 401-403	Open Elective II	3	0	0	3	3	10	25	40	0	0	75
4		OEC 404-406	Open Elective III	3	0	0	3	3	10	25	40	0	0	75
5	Mandatory courses	MC-III	Constitution of India	2	0	0	2	0	0	0	0	0	0	0
6	Project (Or Summer internship)	PROJ ME.401	Short Term Training (21-45 Days) Project-III	0	0	6	6	3	0	0	0	150	150	150
TOTAL				14	0	6	20	15					450	

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(Dhishher)

VIII SEMESTER														
S.N o.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	Project Report	Internal Evaluation	Industry Evaluation	Internal Practica I	End Term Practical	Total Marks
				L	T	P								
1	Project	PROJ-ME 402	Industrial Internship/Project-IV	0	0	20	20	10	100	300	0	0	500	
TOTAL				0	0	20		10					500	
							163						5000	

Professional Elective courses (15)

- PEC MEL 301 Internal Combustion Engines -
- PEC MEL 302 Automobile Engineering +
- PEC MEL 303 Composite Materials +
- PEC MEL 304 Mechatronic Systems +
- PEC MEL 305 Microprocessors in Automation +
- PEC MEL 306 Energy Conservation and Management +
- PEC MEL 307 Refrigeration and Air Conditioning -
- PEC MEL 308 Process Planning and Cost Estimation +
- PEC MEL 309 Principles of Management +
- PEC MEL 310 Design of Transmission Systems +
- PEC MEL 401 Gas Dynamics and Jet Propulsion +
- PEC MEL 402 Total Quality Management +
- PEC MEL 403 Power Plant Engineering +
- PEC MEL 404 Computer Aided Design +
- PEC MEL 405 Finite Element Analysis +

Open Elective Courses (10)

- OEC 301 Soft Skills and Interpersonal Communication -
- OEC 302 ICT for Development -
- OEC 303 Human Resource Development and Organizational Behavior -
- OEC 401 Cyber Law and Ethics -
- OEC 402 Introduction to Philosophical Thoughts -
- OEC 403 Comparative Study of Literature -
- OEC 404 Indian Music System -
- OEC 405 History of Science & Engineering -
- OEC 406 Introduction to Art and Aesthetics -

Sumit (12)



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MIRAK UNIVERSITY
REVISED SYLLABUS EFFECTIVE FROM 2021-22
COURSE: B.Tech BRANCH: Mining Engineering
I SEMESTER

S.No	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC101	Physics	3	1	0	4	4	15	25	50	0	100	
2		BSC102	Mathematics-I	3	1	0	4	4	15	25	50	0	100	
3		BSC103	Chemistry	3	1	0	4	4	15	25	50	0	100	
4		BSC104	Physics Lab	0	0	2	2	1	0	0	0	25	25	50
5	Engineering Science Course	BSC105	Chemistry Lab	0	0	2	2	1	0	0	0	25	25	50
6		ESC101	Basic Electrical Engineering	3	1	0	4	4	15	25	50	0	100	
7		ESC102	Engineering Graphics & Design Lab	0	0	4	4	2	0	0	0	50	50	100
8		ESC103	Basic Electrical Engineering Lab	0	0	2	2	1	0	0	0	25	25	50
TOTAL				12	4	10	26	21					650	

II SEMESTER

S.No	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Basic Science course	BSC106	Mathematics - II	3	1	0	4	4	15	25	50	0	100	
2		ESC104	Programming for Problem Solving	3	1	0	4	4	15	25	50	0	100	
3	Engineering Science Courses	ESC105	Engineering Mechanics	3	1	0	4	4	15	25	50	0	100	
4		ESC106	Basic Electronics	3	1	0	4	4	15	25	50	0	100	
5		ESC107	Programming for Problem Solving Lab	0	0	4	4	2	0	0	0	50	50	100
6	Languages and Social Sciences including Mandatory courses	ESC108	Workshop Practices Lab	0	0	4	4	2	0	0	0	50	50	100
7		HSMC101	English	2	0	0	2	2	10	15	25	0	0	50
8		HSMC102	English Lab	0	0	2	2	1	0	0	0	25	25	50
9		MC-1	Environmental Science	2	0	0	2	0	0	0	0	0	0	0
TOTAL				16	4	10	30	23					700	



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S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks	
				Contact hours per Week										
				L	T	P								
1	Basic Science course	BSC107	Mathematics-II	3	1	0	4	4	15	35	0	0	100	
2		BSC108	Physics for Engineers	2	0	0	2	2	10	15	0	0	50	
3	Professional Core courses	PCC-MI201	Elements of Mining	3	1	0	4	4	15	35	0	0	100	
4		PCC-MI202	Strength of Materials	3	1	0	4	4	15	35	0	0	100	
5		PCC-MI203	Mine Mechanism-I	3	1	0	4	4	15	35	0	0	100	
6		PCC-MI204	Mining Geology-I	3	1	0	4	4	15	35	0	0	100	
7		PCC-MI205	Elements of Mining Lab	0	0	2	2	1	0	0	0	2.5	25	50
8		PCC-MI206	Mining Geology-I Lab	0	0	2	2	1	0	0	0	2.5	25	50
9	Humanities and Social Sciences including Management courses	HSMC201	Organizational Behavior	3	0	0	3	3	10	25	0	0	75	
TOTAL				20	5	4	29	27					725	

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	End Term Part 1	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				Contact hours per Week									
				L	T	P							
1	Professional Core courses	PCC-MI 207	Rock Mechanics	3	1	0	4	4	15	35	0	0	100
2		PCC-MI 208	Mining Geology-II	3	1	0	4	4	15	35	0	0	100
3		PCC-MI 209	Mine Development	3	1	0	4	4	15	35	0	0	100
4		PCC-MI 210	Mine Surveying -I	3	1	0	4	4	15	35	0	0	100
5	Professional Core courses	PCC-MI 211	Mechanical Engineering	3	1	0	4	4	15	35	0	0	100
6		PCC-MI 212	Mining Geology-II Lab	0	0	2	2	1	0	0	2.5	25	50
7		PCC-MI 213	Mine Surveying -I Lab	0	0	4	4	2	0	0	20	50	100
8		PCC-MI 214	Mine Development Lab	0	0	2	2	1	0	0	2.5	25	50
9	Humanities and Social Sciences including Management	H-102	Universal Human Values 2: Understanding Humanity	3	0	0	3	3	10	25	0	0	75
TOTAL				18	5	8	31	27					775

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V SEMESTER													
S.No.	Category	Course Code	Course Title	Contact hours per Week			Credits	TA	End Term Part I	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P							
1	Professional Core courses	PCC-MI 301	Engineering Mathematics- IV	3	1	0	4	15	35	50	0	0	100
2		PCC-MI 302	Mining Geology-III	4	0	0	4	15	35	50	0	0	100
3		PCC-MI 303	Dimensional Stone Technology	3	1	0	4	15	35	50	0	0	100
4	Professional Elective courses	PECC-MI 315	Elective-I	3	0	0	3	10	25	40	0	0	75
5		PECC-MI 325	Elective-II	3	0	0	3	10	25	40	0	0	75
6	Professional Core courses	PCC-MI 304	Mining Geology-III Lab	0	0	2	2	1	0	0	25	25	50
7	Humanities and Social Sciences including Management courses	HSMSO1 (OEL II)	Humanities I (Effective Professional Communication)	2	0	0	2	10	15	25	0	0	50
8	Project (Summer assembly)	PROJ-MI 301	Minor Project / Seminar/Poster/Technology	0	0	2	2	1	0	0	25	25	50
TOTAL				18	2	4	24						600

VI SEMESTER													
S.No.	Category	Course Code	Course Title	Contact hours per Week			Credits	TA	End Term Part I	End Term Part 2 / Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P							
1	Professional Core courses	PCC-MI 305	Underground Metalliferous Mines	3	0	0	3	10	25	40	0	0	75
		PCC-MI 306	Mineral Processing	0	0	2	2	1	0	0	25	25	50
2	Professional Elective courses	PECC-MI 421	Elective-III	3	0	0	3	10	25	40	0	0	75
3		PECC-MI 425	Elective-IV	3	0	0	3	10	25	40	0	0	75
4	Open Elective courses	OEECC01	Open Elective-I	3	0	0	3	10	25	40	0	0	75
5	Mandatory courses	MC-II	Values Education / Career / Leadership / Tradition	2	0	0	2	0	0	0	0	0	0
6	Project	PROJ-MI 302	Project-III (Major Project)	0	0	10	10	3	0	0	125	125	250

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VII SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	TA	End Term Part 1	End Term Part 2/ Viva-Voce	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Professional Elective courses	PEC MBEL431-435	Elective-V	3	0	0	3	3	10	25	40	0	0	75
2		PEC MBEL431-435	Elective-VI	3	0	0	3	3	10	25	40	0	0	75
3	Open Elective courses	OEC-401	Open Elective II	3	0	0	3	3	10	25	40	0	0	75
4		OEC-402	Open Elective III	3	0	0	3	3	10	25	40	0	0	75
5	Mandatory courses	MC-III	Construction of books	2	0	0	2	0	0	0	0	0	0	0
6	Project (Or Summer Internship)	PROJ/MI 401	Short Term Training (21-45 Days) Project-III	0	0	6	6	3	0	0	0	0	150	150
TOTAL													450	

VIII SEMESTER

S.No.	Category	Course Code	Course Title	Contact hours per Week			Total contact hours	Credits	Project Report	Internal Evaluation	Industry Evaluation	Internal Practical	End Term Practical	Total Marks
				L	T	P								
1	Project	PRO/MI 402	Industrial Internship Project-IV	0	0	20	20	10	100	300	0	0	500	
TOTAL													500	
Professional Elective courses (10)													5000	
Soft Skills and Interpersonal Communication														
Entrepreneurship Development														
Codes Law and Ethics														
ICT for Development														
Human Resource Development and Organizational Behavior														
Consumer Electronics														
History of Science & Engineering														
Introduction to Philosophical Thought														
Economic Policies in India														
Indian Music System														



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