

Basaveshwar Engineering College, (Autonomous), Bagalkot
Department of Electronics and Communication Engineering
Teaching and Examination Scheme for B.E. Electronics and Communication Engineering Course

Academic Year 2020 – 2021

Abstract of Credits Distribution

I Semester + II Semester = 40 Credits

III Semester + IV Semester + V Semester + VI Semester + VII Semester + VIII Semester = 135 Credits

Total = 175 Credits

Detailed Distribution of Total 175 Credits Across 1st Semester to 8th Semester

SL. No.	Learning Components	Credits								
		1 st Sem	2 nd Sem	3 rd Sem	4 th Sem	5 th Sem	6 th Sem	7 th Sem	8 th Sem	Total
1	Humanities and Social Science (HSS)	-	-	3	2	1	1	-	2	09
2	Basic Science (PCM)	9.5	9.5	3	3	-	-	-	-	25
3	Engineering Science	10.5	10.5	-	-	-	-	-	-	21
4	Professional Core	-	-	15	19	13	16	5	-	68
5	Professional Elective	-	-	-	-	6	2	6	6	20
6	Open Elective	-	-	-	-	3	3	3	-	09
7	Project/ Internship/Technical Seminar	-	-	-	-	-	2*	3 ⁺ + 2*	12 ⁺⁺ +1 [°]	20
8	Online Courses	-	-	-	-	-	-	3	-	03
Semester Total		20	20	21	24	23	24	22	21	175

* Mini Project	++ Final year project phase-II	°Technical Seminar
+ Final year project phase-I	• Internship	

Basaveshwar Engineering College, Bagalkot**Department of Mechanical Engineering****Academic Year 2020 – 2021****1st Semester (175 Credits Regular) – PHYSICS GROUP**

Sl. No	Code	Subject	Credits	Hours/Week			Examination Marks		
				Lecturer	Tutorial	Practical	CIE	SEE	Total
1	UMA161C	Engineering mathematics-I	4	3	2	-	50	50	100
2	UPH162C	Engineering Physics	4	3	2	-	50	50	100
3	UME163C	Elements of Mechanical Engineering	3	2	2	-	50	50	100
4	UEE164C	Basic Electrical Engineering	3	2	2	-	50	50	100
5	UCS165C	Programming with C	3	3	-	-	50	50	100
6	UHS126M	Constitution of India*	-	2	-	-	50	50	100
7	UPH166L	Engineering Physics Laboratory	1.5	-	-	3	50	50	100
8	UCS167L	C Programming Laboratory	1.5	-	-	3	50	50	100
Total Credits :			20	15	8	6	400	400	800

*** Mandatory subject: Question paper will be of objective type. Students have to pass the subject compulsorily, however marks will not be considered for awarding Grade/Class/Rank.**

2nd Semester (175 Credits Regular) – CHEMISTRY GROUP

Sl. No	Code	Subject	Credits	Hours/Week			Examination Marks		
				Lecturer	Tutorial	Practical	CIE	SEE	Total
1	UMA261C	Engineering Mathematics-II	4	3	2	-	50	50	100
2	UCH268C	Engineering Chemistry	4	3	2	-	50	50	100
3	UEC269C	Basic Electronics	3	2	2	-	50	50	100
4	UCV270C	Engineering Mechanics	3	2	2	-	50	50	100
5	UBT233M	Environmental Studies*	-	2	-	-	50	50	100
6	UME271L	Computer Aided Engineering Graphics	2.5	1	-	3	50	50	100
7	UCH272L	Engineering Chemistry Laboratory	1.5	-	-	3	50	50	100
8	UBE273L	Basic Engineering Laboratory	2	-	-	4	50	50	100
9	UHS274K	English for Engineers	-	2					
Total Credits :			20	15	8	10	400	400	800

* Mandatory subject: Question paper will be of objective type. Students have to pass the subject compulsorily, however marks will not be considered for awarding Grade/Class/Rank.

Basaveshwar Engineering College, Bagalkot

Department of Electronics & Communication Engineering

SCHEME OF TEACHING AND EXAMINATION FOR 2020-21 (REGULAR) and 2021-22 (LATERAL ENTRY) BATCH

B.E III SEMESTER

Sl. No	SUBJECT CODE	SUBJECT	CREDITS	HOURS/ WEEK			EXAMINATION MARKS		
				LECTURE	TUTORIAL	PRACTICAL	CIE	SEE	TOTAL
1	UMA335C	Computational Methods for Electrical Science	3	3	0	0	50	50	100
2	UEC341C	Electronics Devices and Circuits	3	3	0	0	50	50	100
3	UEC342C	Digital Electronics and Logic Design	3	3	0	0	50	50	100
4	UEC348C	Network Analysis	3	3	0	0	50	50	100
5	UEC344C	Human Resource Management	3	3	0	0	50	50	100
6	UEC349C	Data Structures Using "C"	3	3	0	0	50	50	100
7	UEC346L	Electronic Devices and Circuits Laboratory	1.5	0	0	3	50	50	100
8	UEC347L	Digital Electronics Laboratory	1.5	0	0	3	50	50	100
9	UMA330M	Bridge course Mathematics-I*	-	3*	0	0	50*	50*	100*
10	UBT133M	Environmental studies*	-	2*	0	0	50*	50*	100*
Total			21	18	0	6	400	400	800
				23*			500*	500*	1000*

***Bridge Course Mathematics – I and Environmental Studies** are mandatory subjects only for diploma students admitted to BE 3rd Semester through Lateral Entry scheme. Passing the subject is compulsory, however marks will not be considered for awarding grade/class. PP/NP grade will be awarded for passing/not passing the subject respectively.

Note: Online course: (NPTEL / SWAYAM / COURSERA)

1. The course should be of as follows: 04 weeks - 01 credit, 08 weeks - 02 credits, 12 weeks - 03 credits
2. The Students has to qualify in MOOCs recommended course of total 01 credits during III/IV/V/VI/VII semester and to be evaluated in VII Semester

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SCHEME OF TEACHING AND EXAMINATION FOR 2020-21 (REGULAR) and 2021-22 (LATERAL ENTRY) BATCH

B.E IV SEMESTER

Sl. No	SUBJECT CODE	SUBJECT	CREDITS	HOURS/ WEEK			EXAMINATION MARKS		
				LECTURE	TUTORIAL	PRACTICAL	CIE	SEE	TOTAL
1	UMA435C	Statistical Methods for Electrical Science	3	3	0	0	50	50	100
2	UEC441C	Signals and Systems	4	3	2	0	50	50	100
3	UEC442C	Linear Integrated Circuits and Applications	3	3	0	0	50	50	100
4	UEC443C	8051 Microcontroller	3	3	0	0	50	50	100
5	UEC444C	Electronic Circuits Design	3	3	0	0	50	50	100
6	UEC445C	Analog Communication	3	3	0	0	50	50	100
7	UHS001N	Fundamentals of Quantitative Aptitude and Soft Skills	1	2	0	0	50	50	100
8	UEC441L	Analog Communication Laboratory	1.5	-	-	3	50	50	100
9	UEC442L	Microcontroller Laboratory	1.5	-	-	3	50	50	100
10	UHS488C	Samskruthika Kannada**	1.0	2	-	-	50	50	100
	UHS489C	Balake Kannada***							
11	UMA430M	Bridge course Mathematics-II*	-	3*	-	-	50*	50*	100*
12	UHS226M	Constitution of India *	-	2*	-	-	50*	50*	100*
Total			24	22 27*	02	6	500 600*	500 600*	1000 1200*

***Bridge Course Mathematics – II and Constitution of India** are mandatory subjects only for diploma students admitted to BE 3rd Semester through Lateral Entry scheme. Passing the subject is compulsory, however marks will not be considered for awarding grade/class. PP/NP grade will be awarded for passing/not passing the subject respectively.

****Students who have studied Kannada at primary level**

***** Students who have not studied Kannada at primary level**

Note: Online course: (NPTEL / SWAYAM / COURSERA)

1. The course should be of as follows: 04 weeks - 01 credit, 08 weeks - 02 credits, 12 weeks - 03 credits
2. The Students has to qualify in MOOCs recommended course of total 01 credits during III/IV/V/VI/VII semester and to be evaluated in VII Semester

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B.E V SEMESTER

Sl. No	SUBJECT CODE	SUBJECT	CREDITS	HOURS/ WEEK			EXAMINATION MARKS		
				LECTURE	TUTORIAL	PRACTICAL	CIE	SEE	TOTAL
1	UEC551C	Digital Signal Processing	4	3	2	0	50	50	100
2	UEC542C	Digital Communication	3	3	0	0	50	50	100
3	UEC543C	Verilog Programming	3	3	0	0	50	50	100
4	UHS002N	Advanced Quantitative Aptitude and Soft Skills	1	2	0	0	50	50	100
5	Professional Elective-I								
	UEC545E	Computer Organization	3	3	0	0	50	50	100
	UEC546E	Electronic Instrumentation							
	UEC547E	Object-Oriented Programming with C++							
6	Professional Elective-II								
	UEC548E	Micro Electro Mechanical Systems	3	3	0	0	50	50	100
	UEC549E	Automotive Electronics							
	UEC540E	Biomedical Signal Processing							
7	Open Elective-I*		3	3	0	0	50	50	100
8	UEC531L	Digital Signal Processing Laboratory	1.5	0	0	3	50	50	100
9	UEC532L	Verilog Laboratory	1.5	0	0	3	50	50	100
Total			23	20	02	06	450	450	900

* Open elective – I: It is offered by other department to Electronics and Communication Engineering Students.

*Open Elective-I subjects offered by the department to other department students are

1) UEC534N: Electronic Engineering Materials, 2) UEC535N: Fundamentals of Wireless Communications.

Note: Online course: (NPTEL / SWAYAM / COURSERA)

1. The course should be of as follows: 04 weeks - 01 credit, 08 weeks - 02 credits, 12 weeks - 03 credits
2. The Students has to qualify in MOOCs recommended course of total 01 credits during III/IV/V/VI/VII semester and to be evaluated in VII Semester

Internship: For awarding B.E. (Electronics and Communication Engineering) degree, each student has to complete minimum of 04 weeks or (02 weeks + 02 weeks) of Internship between 4th and 6th semester to earn 02 credits which will be evaluated during 7th Semester.

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Department of Electronics & Communication Engineering

**SCHEME OF TEACHING AND EXAMINATION FOR 2020-21 (REGULAR) and 2021-22 (LATERAL ENTRY) BATCH
B.E VI SEMESTER**

Sl. No	SUBJECT CODE	SUBJECT	CREDITS	HOURS/ WEEK			EXAMINATION MARKS		
				LECTURE	TUTORIAL	PRACTICAL	CIE	SEE	TOTAL
1	UEC641C	Field Theory	3	2	2	0	50	50	100
2	UEC642C	Computer Networks	3	3	0	0	50	50	100
3	UEC643C	CMOS Digital VLSI Design	3	3	0	0	50	50	100
4	UEC644C	Control Systems	3	3	0	0	50	50	100
5	UHS003N	Career Planning and Professional Skills	1	2	0	0	50	50	100
6	Professional Elective-III								
	UEC655E	Embedded Systems	2	2	0	0	50	50	100
	UEC656E	Digital Verification							
	UEC657E	Mobile Communications							
7	Open Elective-II*		3	3	0	0	50	50	100
8	UCS659L	Advanced "C" Laboratory	2	0	2	2	50	50	100
9	UEC631L	Computer Networks Laboratory	1	0	0	2	50	50	100
10	UEC632L	VLSI Laboratory	1	0	0	2	50	50	100
11	UEC634P	Mini Project	2	0	0	6	50	50	100
12	UHVXXXM	Universal Human Values	0	3	0	0	50	50	100
Total			24	21	04	12	600	600	1200

*** Open elective – II: It is offered by other department to Electronics and Communication Engineering Students.**

Open Elective-II subjects offered by the Electronics and Communication Engineering department to other department students are

1) UEC634N: Modeling and Simulation of Engineering Systems, 2) UEC635N: Image Processing.

Note: Online course: (NPTEL / SWAYAM / COURSERA)

- The course should be of as follows: 04 weeks - 01 credit, 08 weeks - 02 credits, 12 weeks - 03 credits
- The Students has to qualify in MOOCs recommended course of total 01 credits during III/IV/V/VI/VII semester and to be evaluated in VII Semester

Internship: For awarding B.E. (Electronics and Communication Engineering) degree, each student has to complete minimum of 04 weeks or (02 weeks + 02 weeks) of Internship between 4th and 6th semester to earn 02 credits which will be evaluated during 7th Semester.

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B.E VII SEMESTER

Sl. No	SUBJECT CODE	SUBJECT	CREDITS	HOURS/ WEEK			EXAMINATION MARKS		
				LECTURE	TUTORIAL	PRACTICAL	CIE	SEE	TOTAL
1	UEC741C	Microwaves and Antennas	3	3	0	0	50	50	100
2	UEC742I	Internship	2	0	0	4	70	30	100
Professional Elective-IV									
3	UEC743E	Information Theory and Coding	3	3	0	0	50	50	100
	UEC744E	Multimedia Communication							
	UEC745E	Soft Computing							
Professional Elective-V									
4	UEC746E	Digital Signal Processing with Field Programmable Gate Arrays	3	3	0	0	50	50	100
	UEC747E	Wireless Networks					50	50	100
	UEC748E	Industrial Automation					50	50	100
5	Open Elective-III*		3	3	0	0	50	50	100
6	UEC731L	Advanced Communication Laboratory	1	0	0	2	50	50	100
7	UEC732L	Modeling and Simulation Laboratory	1	0	0	2	50	50	100
8	UEC734P	Project Phase - I	3	0	0	12	50	50	100
9	UECXXXO	Massive Open Online Courses (MOOCs)**	3	-	-	-	-	-	-
Total			22	12	00	20	500	500	1000

* Open elective – III: It is offered by other department to Electronics and Communication Engineering Students.

Open Elective-III subjects offered by the Electronics and Communication Engineering department to other department students are

1) UEC734N: Nanotechnology, 2) UEC735N: Research Methodology

Note: Online course: (NPTEL / SWAYAM / COURSERA)

1. The course should be of as follows: 04 weeks - 01 credit, 08 weeks - 02 credits, 12 weeks - 03 credits
2. The Students has to qualify in MOOCs recommended course of total 01 credits during III/IV/V/VI/VII semester and to be evaluated in VII Semester

Internship: For awarding B.E. (Electronics and Communication Engineering) degree, each student has to complete minimum of 04 weeks or (02 weeks + 02 weeks) of Internship between 4th and 6th semester to earn 02 credits which will be evaluated during 7th Semester.

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**SCHEME OF TEACHING AND EXAMINATION FOR 2020-21 (REGULAR) and 2021-22 (LATERAL ENTRY) BATCH
B.E VIII SEMESTER**

Sl. No	SUBJECT CODE	SUBJECT	CREDITS	HOURS/ WEEK			EXAMINATION MARKS		
				LECTURE	TUTORIAL	PRACTICAL	CIE	SEE	TOTAL
1	UEC840C	Project Management and Intellectual Property Rights	2	2	0	0	50	50	100
2	Professional Elective-VI								
	UEC842E	Satellite Communications	3	3	0	0	50	50	100
	UEC843E	Speech Processing							
	UEC844E	Advance Control Systems							
3	Professional Elective-VII								
	UEC845E	Wireless Sensor Networks	3	3	0	0	50	50	100
	UEC846E	Machine Learning							
	UEC847E	Optical Fiber Communication							
4	UEC833P	Project Phase-II	12	0	0	24	50	50	100
5	UEC831S	Technical Seminar	01	0	0	02	50	50	100
Total			21	08	00	26	250	250	500