



K. S. SCHOOL OF ENGINEERING AND MANAGEMENT

Department of Electronics and Communication Engineering


Date: 27/01/2023

CIRCULAR

Elective subject Preferences for EVEN semester Feb-June 2022-23

All the students of V and VII semester (A & B) are hereby informed to provide the elective subject preferences for semester Feb-June 2023 in the attached sheet latest by 10th Feb 2023.

Insight about the Elective subjects will be given by the corresponding teachers; a separate Google form will be shared to choose both open elective and Professional elective subjects after introduction class.


Co-coordinator


HOD, ECE
Professor & Head
Dept. of Electronics & Communication Engineering
K.S. School of Engineering & Management
Bangalore - 560 109.



CIRCULAR

Date: 27/01/2023

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

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

Cc to:

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

K. Rama
Principal

27/1/23
Dr. K. RAMA NARASIMHA
Principal/Director
K S School of Engineering and Mana
Bengaluru - 560 109

K S School of Engineering and Management

Department of Electronics and Communication Engineering

Professional Elective list

2022-23(EVEN Semester)

List of ECE students opted Professional elective offered from Dept. of ECE

Subject with code: 18EC641-Operating System(Professional Elective-I)

Sl.No	Name	USN	MOBILE NO
1	MOHAMMED JUNAID M GUDDAD	1KG19EC061	7338644452
2	A HARSHATH	1KG20EC001	9392655068
3	AKSHATHA S	1KG20EC004	7204378803
4	CHAITRA L	1KG20EC006	7892524925
5	CHANDANA R	1KG20EC007	8660642156
6	G POOJA	1KG20EC011	6303125962
7	GUDI BHARATH KUMAR	1KG20EC013	6300973201
8	K GOWTHAM	1KG20EC014	9381132057
9	KAKARLA JASWANTH CHOWDARY	1KG20EC015	9347889339
10	KISHORE KUMAR M	1KG20EC016	9360906516
11	N S BANU PRASAD	1KG20EC024	9391601206
12	NARRA BHASKAR NAIDU	1KG20EC025	7892398842
13	NISHANTH NARAYAN	1KG20EC028	8123510112
14	NITHIN G N	1KG20EC029	8639590409
15	CHOWDARY	1KG20EC032	8639590409
16	RAGHAVENDRA C	1KG20EC035	6363962749
17	RAKSHITHA M	1KG20EC036	7483657379
18	SACHIN R	1KG20EC037	8310199242
19	SADHANA H D	1KG20EC038	9686532697
20	SUPRITH R	1KG20EC042	7204777967
21	TANUJA N	1KG20EC043	8951874952
22	TEJASHREE M	1KG20EC044	8123073468
23	UJWALA H S	1KG20EC045	7411444306
24	NISHANTH GOWDA M	1KG21EC400	8217038475
25	SWAMY M	1KG21EC401	8217038475

Signature of the Co-ordinator

HOD

Professor & Head

Dept of Electronics & Communication Engineering
K. S. School of Engineering & Management
Bangalore - 560 109.

K S School of Engineering and Management

Department of Electronics and Communication Engineering
Professional Elective list Academic year 2022-23(EVEN Semester)

List of ECE students opted Professional elective offered from Dept. of ECE

Subject with code: 18EC646-Python Application Programming(P-1)

Sl.No	Name	USN	MOBILE NO
1	A YUVA SREE	1KG20EC002	8341356642
2	ADUSUMALLI ROHITH	1KG20EC003	9573721563
3	ATHISH NAVEEN	1KG20EC005	7406433565
4	DEEPIKA	1KG20EC008	7995481006
5	G NEERAJ	1KG20EC010	6309471245
6	JYOTHISWAR REDDY	1KG20EC012	9347338060
7	KOUSHIK	1KG20EC017	6363514910
8	KUCHE RAVI TEJA	1KG20EC018	9182920622
9	M.B.HEMANTH	1KG20EC019	9242401965
10	M LOKESH	1KG20EC020	9345491405
11	MAKKENA HEMANTH	1KG20EC021	9502740830
12	MALEPATI KAIVALYA	1KG20EC022	9154380288
13	MANNAM VANDANA	1KG20EC023	7013644471
14	NARRA SIRI	1KG20EC026	7275015752
15	NEHA KUMARI S	1KG20EC027	9030203517
16	PAPPURI HARITHA	1KG20EC030	9113051430
17	POOJA R	1KG20EC031	8197389889
18	PUNITH P	1KG20EC033	7406024648
19	R PARTHIBAN	1KG20EC034	9390901895
20	CHOWDARY	1KG20EC039	9390901895
21	CHOWDARY	1KG20EC040	8884290057
22	UMA C	1KG20EC046	8341671736
23	V SASIDHAR	1KG20EC047	9663110823
24	YASHASWINI R	1KG20EC048	9535645252


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K S School of Engineering and Management

Department of Electronics and Communication Engineering

Open Elective list

List of ECE students opted open elective offered from Dept. of Civil Engineering

Subject with code: 18CV656-Conservation of Natural Resources(Open Elective-A)

Sl.No	Name of the student	USN	Contact No.
1	MOHAMMED JUNAID M	1KG19EC061	7338644452
2	A HARSHATH	1KG20EC001	9392655068
3	ADUSUMALLI ROHITH	1KG20EC003	9573721563
4	AKSHATHA S	1KG20EC004	7204378803
5	CHAITRA L	1KG20EC006	7892524925
6	CHANDANA R	1KG20EC007	8660642156
7	G NEERAJ	1KG20EC010	6309471245
8	G POOJA	1KG20EC011	6303125962
9	GANGEDDULA	1KG20EC012	9347338060
10	GUDI BHARATH KUMAR	1KG20EC013	6300973201
11	K GOWTHAM	1KG20EC014	9381132067
12	KAKARLA JASWANTH	1KG20EC015	9347889339
13	KISHORE KUMAR M	1KG20EC016	9360906516
14	KUCHE RAVI TEJA	1KG20EC018	9182920622
15	M.B.HEMANTH	1KG20EC019	9242401965
16	MALEPATI KAIVALYA	1KG20EC022	9154380288
17	N S BANU PRASAD	1KG20EC024	8903045583
18	NARRA BHASKAR NAIDU	1KG20EC025	9391601206
19	NARRA SIRI	1KG20EC026	7013644471
20	NEHA KUMARI S	1KG20EC027	7275015752
21	NISHANTH NARAYAN	1KG20EC028	7892398842
22	NITHIN G N	1KG20EC029	8123510112
23	POTHUGUNTA SAI KETHAN	1KG20EC032	8639590409
24	R PARTHIBAN	1KG20EC034	7406024648
25	RAGHAVENDRA C	1KG20EC035	9380396663
26	RAKSHITHA M	1KG20EC036	6363962749
27	SACHIN R	1KG20EC037	7483657379
28	SADHANA H D	1KG20EC038	9686532697
29	SUPRITH R	1KG20EC042	8310199242
30	TANUJA N	1KG20EC043	7204777967
31	TEJASHREE M	1KG20EC044	8951874952
32	UJWALA H S	1KG20EC045	7411444306
33	UMA C	1KG20EC046	8884290057
34	YASHASWINI R	1KG20EC048	9663110823
35	NISHANTH GOWDA M	1KG21EC400	8123073468
36	SWAMY M	1KG21EC401	8217038475


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K.S. School of Engineering & Management
Bangalore - 560 109.

K S School of Engineering and Management

Department of Electronics and Communication Engineering

Professional Elective list **Sem:VIII** Academic year 2022-23(EVEN Semester)

List of ECE students opted Professional elective offered from Dept. of ECE

Sl.No	Name	USN	MOBILE NO	Subject Chosen
1	Kavya S	1KG18EC027	7829215770	18EC821-Network Security
2	Sadhana HC	1KG18EC046	8861041015	18EC821-Network Security
3	Akshay C Kashyap	1Kg18EC004	7760882693	18EC821-Network Security
4	Abhishek M	1KG18EC001	9901861493	18EC821-Network Security
5	Pavanajakshi	1KG18EC023	9880002816	18EC821-Network Security
6	O Haritha	1KG18EC039	6362941368	18EC821-Network Security
7	Asmat Bashir	1KG19EC402	6005784113	18EC821-Network Security
8	Yogesh K	1KG18EC069	7337772612	18EC821-Network Security
9	Venkatesh N	1KG18EC062	8088591694	18EC821-Network Security
10	Aaira Fathima	1KG17EC002	6361451540	18EC821-Network Security
11	Kuche Dhanush	1KG18EC030	6302664372	18EC821-Network Security
12	Sinchana K P	1KG18EC053	9632798363	18EC821-Network Security
13	Jaswanth B S	1KG18EC024	9148918251	18EC821-Network Security
14	M JYOTISHWAR	1KG18EC025	9663675027	18EC821-Network Security
15	Revanth A	1KG18EC045	8123663629	18EC821-Network Security
16	Para Lokesh	1KG18EC041	6361902612	18EC821-Network Security
17	Maru Aswini	1KG18EC032	9550188476	18EC821-Network Security
18	PK GANESH	1KG18EC040	9986530196	18EC821-Network Security
19	Anikethana N M	1KG18EC005	9611859063	18EC821-Network Security
20	Pavan V	1KG19EC406	7795250554	18EC821-Network Security
21	Rakshitha M R	1KG18EC044	9902253382	18EC821-Network Security
22	Mayamma N	1KG18EC033	8151817436	18EC821-Network Security
23	Anu A	1KG18EC006	9108988994	18EC821-Network Security
24	Kavana H	1KG18EC026	8971610119	18EC821-Network Security
25	Chandan Gowda S	1KG19EC403	7349772879	18EC821-Network Security
26	BhanuPriya C N	1KG18EC008	7022663610	18EC821-Network Security
27	Madhu Narasimha	1KG19EC404	9481633957	18EC821-Network Security
28	Harshitha M	1KG18EC019	7337620712	18EC821-Network Security
29	Kishore Kumar S	1KG18EC029	9591073705	18EC821-Network Security
30	Edullabasha	1kg18ec014	7349733816	18EC821-Network Security
31	Sanjay B	1KG18EC048	7353899250	18EC821-Network Security
32	Doma Devisree	1KG18EC013	6362120338	18EC821-Network Security
33	Chandana K M	1KG18EC009	8197692175	18EC821-Network Security
34	Samyuktha	1KG18EC047	6360792600	18EC821-Network Security
35	Sharan kumar m	1KG18EC051	6362113242	18EC821-Network Security
36	SRIMANNARAYANA N K	1KG18EC055	8088690995	18EC821-Network Security
37	Nikitha CM	1kg18ec037	7624846699	18EC821-Network Security
38	Gurukiran.K	1KG18EC017	9535820674	18EC821-Network Security
39	Abhilash pr	1kg19ec401	8431796050	18EC821-Network Security
40	J Akila	1KG18EC022	9381490005	18EC821-Network Security

41	Talluru Gopi pravalika	1kg18ec059	7483277237	18EC821-Network Security
42	CHANDRASHEKAR N	1KG18EC010	9686202696	18EC821-Network Security
43	Niraj Nishant	1KG18EC038	9060185601	18EC821-Network Security
44	SRIRAMSRINIVASAN N K	1KG18EC056	9535227722	18EC821-Network Security
45	Vinisha RP	1KG18EC064	9108266600	18EC821-Network Security
46	Keerthi.G	1KG18EC016		18EC821-Network Security
47	Divyashree S	1kg18ec012	9380953467	18EC821-Network Security
48	Sreeraksha G S	1KG18EC054	8904749783	18EC821-Network Security
49	Vignesh B	1KG18EC063	9482383073	18EC821-Network Security
50	Varsha. H	1KG18EC060	9606133535	18EC821-Network Security
51	Harish S	1KG18EC018	8197608667	18EC821-Network Security
52	Yashaswini G	1KG18EC067	8317481603	18EC821-Network Security
53	Yashaswini G M	1KG18EC068	7022247398	18EC821-Network Security
54	Aishwarya N Kamaty	1kg18ec003	8317481603	18EC821-Network Security
55	SIDDANTH SAND	1KG18EC052	9148438872	18EC821-Network Security
56	Vishal K	1KG18EC065	9901584603	18EC821-Network Security
57	Kavyashree K	1KG18EC028	9916880520	18EC821-Network Security
58	Deeksha S	1KG18EC011	7411149736	18EC821-Network Security
59	Priyanka Nag G V	1KG18EC43	9148438872	18EC821-Network Security
60	Santosh R	1KG18EC049	9164629952	18EC821-Network Security
61	Nandakumar	1KG18EC035	9980776021	18EC821-Network Security
62	Naveen	1kg18ec036	9986896774	18EC821-Network Security
63	Sushma R	1KG18EC058	8296351939	18EC821-Network Security
64	Veluru Harish	1KG18EC061	7036791995	18EC821-Network Security
65	Mohit sintre	1kg18ec034	6364831859	18EC821-Network Security
66	Y DHANUSH	1KG18EC066	9505577177	18EC821-Network Security
67	R Yashas	1KG17EC060	9505577177	18EC821-Network Security
68	Basineni Kaveri	1KG18EC007	9515953248	18EC821-Network Security
69	Hrithik V	1kg18ec021	6362697216	18EC821-Network Security
70	Gayathri	1KG18EC015	6303672940	18EC821-Network Security
71	Sumanth BL	1KG18EC057	9071147728	18EC821-Network Security
72	Hrishikesh KM	1KG18EC020	9742777645	18EC821-Network Security

Signature of the Co-ordinator

Signature of the HOD

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ADDITIONAL OPEN ELECTIVES-A OFFERED BY EC/TC BOARD

B. E. EC/TE Choice Based Credit System (CBCS) and Outcome Based Education (OBE) SEMESTER – VI MICROCONTROLLERS			
Course Code	18EC654	CIE Marks	40
Number of Lecture Hours/Week	03	SEE Marks	60
Total Number of Lecture Hours	40(8Hours/Module)	Exam Hours	03
CREDITS – 03			
Course objective: This course will enable students to: <ul style="list-style-type: none"> • Learn architecture of 8051. • Learn programming skills using Assembly language and C • Design and interface microcontroller based embedded systems. • Build projects 			
Module-1			RBT Level
Microprocessors and Microcontroller: Introduction, Microprocessors and Microcontrollers, Microcontroller Survey. (Text 1- Chapter 1) The 8051 Architecture: Introduction, Architecture of 8051, Pin diagram of 8051, Memory organization. (Text 1- Chapter 2)			L1, L2
Module-2			
Addressing Modes in 8051 Microcontroller: Introduction, Addressing Modes, External Data Moves, Code Memory Read only Data Moves, PUSH and POP opcodes, Data Exchanges, Example Programs. (Text 1- Chapter 3)			L1, L2
Module-3			
Instruction set: Instruction timings, 8051 instructions: Data transfer instructions, Arithmetic instructions, Logical instructions, Branch instructions, Subroutine instructions. Bit manipulation instruction. (Text 1- Chapter 4, 5 and 6)			L1, L2, L3
Module-4			
8051 Microcontroller Interfacing and Applications: Interfacing 8051 to LCD, Keyboard, parallel and serial ADC, DAC interfacing and programming. (Text 2 – Chapter 12 and 13)			L1,L2, L3
Module-5			
8051 Microcontroller Interrupts and Timers/counters: Basics of interrupts, 8051 interrupt structure, Timers and Counters, 8051 timers/counters, programming 8051 timers in assembly and C. (Text 2 – Chapter 9, Chapter 11 -11.1) 8051 Microcontroller Serial Communication: Data communication, Basics of Serial Data Communication, 8051 Serial Communication, connections to RS-232, Serial communication Programming in assembly and C. (Text 2 – Chapter 10- 10.1,10.2, 10.3)			L1, L2, L3
Course Outcomes: After studying this course, students will be able to: <ol style="list-style-type: none"> 1. Explain the basics of Microprocessor and Microcontroller 2. Relate to the 8051 Microcontroller architecture and Pin description 3. Analyze 8051 Addressing modes and use the 8051 instruction set 4. Program the on-chip peripherals in 8051 5. Design and develop applications using 8051 Assembly language and C program 			
Students have to conduct the following experiments as a part of CIE marks along with other Activities: <ol style="list-style-type: none"> 1. Write an 8051 ALP to exchange n = 5 bytes of data at location 0027H and at location 0041H. 2. Write an 8051 ALP to sort an array of n = 6 bytes of data in ascending order stored from location 9000H.(use bubble sort algorithm) 			

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: B.E: Electronics & Communication Engineering

VIII SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	1SEC81	Wireless and Cellular Communication	+	3	--	--	03	40	60	100	3
2	PEC	18XX82X	Professional Elective - 4		3	--	--	03	40	60	100	3
3	Project	1SECP83	Project Work Phase - 2		--	--	2	03	40	60	100	8
4	Seminar	1SECS84	Technical Seminar		--	--	2	03	100	--	100	1
5	Internship	1SEC185	Internship		Completed during the vacation/s of VI and VII semesters and /or VII and VIII semesters.)			03	40	60	100	3
TOTAL					06	--	04	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective.

Professional Elective - 4

Course code under 18XX82X	Course Title
18EC821	Network Security + 17EC835 - Network & Cyber Security
18EC822	Micro Electro Mechanical Systems
18EC823	Radar Engineering
18EC824	Optical Communication Networks + 17EC82 - Fiber optics & Networks
18EC825	Biomedical Signal Processing

B.E.: Electronics & Communication Engineering

VIII SEMESTER

Sl. No	Course Code	Title	Teaching Department	Teaching Hours /Week		Examination				Credits
				Theory	Practical/ Drawing	Duration in hours	SEE Marks	CIE Marks	Total Marks	
1	17EC81	Wireless Cellular and LTE 4G Broadband	EC	4	-	3	60	40	100	4
2	17EC82	Fiber Optics & Networks	EC	4	-	3	60	40	100	4
3	17EC83X	Professional Elective-5	EC	3	-	3	60	40	100	3
4	17EC84	Internship/Professional Practice	EC	Industry Oriented		3	50	50	100	2
5	17ECP85	Project Work	EC	-	6	3	100	100	200	6
6	17ECS86	Seminar	EC	-	4	-	-	100	100	1
TOTAL				Theory: 11 hours Project and Seminar: 10 hours		15	330	370	700	20

Professional Elective -5	
17EC831	Micro Electro Mechanical Systems
17EC832	Speech Processing
17EC833	Radar Engineering
17EC834	Machine learning
17EC835	Network and Cyber Security ✓

1. **Internship/ Professional Practice:** 4 Weeks internship to be completed between the (VI and VII semester vacation) and/or (VII and VIII semester vacation) period.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examination 2018 – 19
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

Programme: B.E: Electronics & Communication Engineering

VI SEMESTER

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination			Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks		Total Marks
					L	T	P					
1	PCC	18EC61	Digital Communication		3	2	--	03	40	60	100	4
2	PCC	18EC62	Embedded Systems		3	2	--	03	40	60	100	4
3	PCC	18EC63	Microwave and Antennas		3	2	--	03	40	60	100	4
4	PEC	18XX64X	Professional Elective -I		3	--	--	03	40	60	100	3
5	OEC	18XX65X	Open Elective -A		3	--	--	03	40	60	100	3
6	PCC	18ECL66	Embedded Systems Laboratory		--	2	2	03	40	60	100	2
7	PCC	18ECL67	Communication Laboratory		--	2	2	03	40	60	100	2
8	MP	18ECMP68	Mini-project		--	--	2	03	40	60	100	2
9	Internship	--	Internship	To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.								
TOTAL					15	10	6	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

Professional Elective -I

Course code under 18XX64X	Course Title
18EC641	Operating System
18EC642	Artificial Neural Networks
18EC643	Data Structures using C++
18EC644	Digital System Design Using Verilog
18EC645	Nanoelectronics
18EC646	Python Application Programming

OPEN ELECTIVE group-B

18EC651	Signal Processing
18EC652	Sensors & Signal Conditioning
18EC653	Virtual Instrumentation
18EC654	Microcontrollers
18EC655	Basic VLSI Design

Students can select any one of the open electives offered by other Departments except those that are offered by the parent Department (Please refer to the list of open electives under 18XX65X).

Selection of an open elective shall not be allowed if,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Mini-project work:

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini- project can be assigned to an individual student or to a group having not more than 4 students.

CIE procedure for Mini-project:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the Mini-project work, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college.

The CIE marks awarded for the Mini-project, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Mini-project:

(i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.

(ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.