DEVI AHILYA VISHWAVIDYALAYA, INDORE

SCHOOL OF ELECTRONICS

PROGRAMME CODE: EL5B

PROGRAMME TITLE: M.Sc. Electronics & Communication

OBJECTIVES

- To prepare the students to excel and develop expertise in the field of Electronics and wireless communication.
- Students can expect to have a workable knowledge of necessary software and hardware tools to do so.
- To impart theoretical as well as practical knowledge of Microcontrollers, Wirelesss communication, Computer Network

ELIGIBILITY

B.Sc. or B.Sc. (Hons.) (Electronics/IT/CS/Physics) or BCA with minimum 50% aggregate marks.

AGE LIMIT: As per the directives of Government of Madhya Pradesh, There is no upper age limit for admission to various programmes.

ADMISSION PROCEDURE

Admission will be done through Common Entrance Test (CET-2019).

SEATS: 40 (reservation as per state Govt. rules).

Course	Total Seats	UR_OP	UR_F	ST_OP	ST_F	SC_OP	SC_F	OBC_OP	OBC_F	NRI	PH	JKR	JKM	EW T	EW NT
M.Sc. (Electronics & Comm.)	40	12	6	6	2	4	2	4	2	2	1	1	1	1	1

UR_OP-Unreserved Open, UR_F-Unreserved Female, ST_OP-Scheduled Tribe Open, ST_F-Scheduled Tribe Female, SC_OP-Scheduled Caste Open, SC_F-Scheduled Caste Female, OBC_OP-OBC Open, OBC_F-OBC Female, NRI-Non Residing Indian, PH-Physically Handicapped, JKR-Jammu & Kashmir Resident, JKM-Jammu & Kashmir Migrant, EWT-Employee Ward Teaching, EWNT-Employee Ward Non Teaching

DURATION: Four Semesters (Two Years)

FEE STRUCTURE (2020-22)

Semester	Academic Fee	Development & Maintenance	Students' Services Fee	Examination Fee	Total (Rs.) Including caution

		Fee				Money	
			Boys	**Girls**		**Boys**	**Girls**
First	2500	1500	3300	3111	2500	13800	13611
Second	2500	1500	2911	2722	2500	9411	9222
Third	2500	1500	3300	3111	2500	9800	9611
Fourth	2500	1500	2911	2722	2500	9411	9222

- Caution money (Refundable) of Rs. 4000/- will be charged additionally in the first semester.
- Alumni Fee of Rs. 500/- will be charged extra in the first semester.
- If a student repeats a paper(s) in a semester, an additional fee of Rs.500/- per paper shall be payable.
- For NRI/ FN/ PIO Candidates, a fee of US$ 3500 Per Annum shall be payable on yearly basis. They will have to pay a refundable deposit of US$ 500 once at the time of admission.
- Hostel Fee and Central Library Fee will be extra.

PROGRAMME STRUCTURE (2020-22)

Semester I   32 Credits

Sr. No.	Course Code	Course Name	Lecture (L) Hr	Tutorial (T) Hr	Practical (P) Hr	Credit
1	EL51101	Signals and Systems-I	3	1	--	4
2	EL51102	Electromagnetic Theory	3	1	--	4
3	EL51103	Programming in C Language	3	1	--	4
4	EL51104	Devices and Circuit Theory	3	1	--	4
5	EL51105	Digital Design	3	1	--	4
6	EL51203	C Programming Lab	0	0	4	2
7	EL51204 /05	Device and Circuit Lab/ Digital Design Lab	0	0	4+4	2+2
8	EL51301	Seminar	0	0	--	2
9	EL51401	Comprehensive Viva-Voce	--	--	--	4

Semester II   32Credits

Sr. No.	Course Code	Course Name	Lecture (L) Hr	Tutorial (T) Hr	Practical (P) Hr	Credit
1	EL52101	Microprocessor & Interfacing	3	1	--	4
2	EL52102	Analog & Digital Communication	3	1	--	4
3	EL52103	Computer Networks	3	1	--	4
4	EL52104	Signals and Systems-II	3	1	--	4
5	EL52105	Object Oriented Programming(using JAVA)	3	1	--	4
6	EL52202	Microprocessor & Interfacing Lab	0	0	4	2
6	EL52204 /02	MATLAB Lab /Analog & Digital Comm. Lab	0	0	4+4	2+2
7	EL52205	JAVA Programming Lab	0	0	4	2
8	EL52401	Comprehensive Viva-Voce	--	--	--	4

Semester III   30 Credits

Sr. No.	Course Code	Course Name	Lecture (L) Hr	Tutorial (T) Hr	Practical (P) Hr	Credit
1	EL53101	Control Systems	3	1	--	4
2	EL53102	Microwave Communication	3	1	--	4

3	EL53103	Microcontroller & Interfacing	3	1	--	4
4	EL53104	Wireless Communication.	3	1	--	4
5	EL53105	VHDL	3	1	--	4
6	EL53204	Wireless Communication Laboratory	0	0	4	2
7	EL53205	VHDL Laboratory	0	0	4	2
8	EL53203	Microcontroller & Interfacing Lab.	0	0	4	2
9	EL53401	Comprehensive Viva-Voce	--	--	--	4

Semester IV   **12 Credits**

Sr. No.	Course Code	Course Name	Lecture (L) Hr	Tutorial (T) Hr	Practical (P) Hr	Credit
1	EL54501	Major Project Viva-Voce	-	-	-	12

Total   **106 credits**

Note: The above programme structure can be modified as per requirement from time to time in accordance with University Ordinance No. 14.

PROGRAMME OUTCOMES

Create an educational environment to mould the students to meet the challenges of modern Electronics & Communication industry through state of the art technical knowledge and innovative experimental approaches. Following are the programme outcomes.

1. Analyze , plan and apply the acquired knowledge in basic sciences and mathematics in solving Electronics and Communication Engineering problems with technical, economic, environmental and social contexts.
2. Design, build and test analog & digital electronic systems for given specifications.
3. Architect modern communication systems to meet stated requirements.
4. Work in a team using technical knowhow, common tools and environments to achieve project objectives.
5. Communicate effectively, demonstrate leadership qualities and exhibit professional conduct in their career.
6. Engage in lifelong learning, career enhancement and adapt to changing professional and societal needs.
7. In addition the course caters to the requirements of providing complete exposure to NET/SET syllabus for Electronics farmed by the U.G.C.

JOB OPPORTUNITIES

Ability for employment

1. **Internship: Students may serve as internee in many** Electronics and communication industries for completion of six month project work.
2. **Placement**
   (a) As R &D Design Engineer in the Electronics domain
   (b) As system engineer in telecommunication industry
   (c) As faculty, educator in higher education

(d) As Scientist and other govt R& D jobs

Ability for higher education and research in the areas of Electronics and Communication