Walchand College of Engineering

(Government Aided Autonomous Institute)

Vishrambag, Sangli. 416415

*** Platinum Jubilee Year ***

Credit System for
F.Y. M.Tech. (Electronics Engineering)
Sem-I and II

2021-22

Walchand College of Engineering, Sangli
(Government Aided Autonomous Institute)

Credit System for F.Y. M.Tech. (Electronics Engineering) Sem-I AY 2021-22

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	T1/LA1	T2/LA2	ESE
Professional Core (Theory)												
1	PC	5EN501	FPGA Based System Design	3	0	0	0	3	3	20	20	60
2	PC	5EN502	Embedded System Design	3	0	0	0	3	3	20	20	60
Professional Core (Lab)												
3	PC	5EN560	Research Methodology	0	0	0	2	2	2	30	30	40
4	PR	5EN551	Activity Based Lab for FPGA Based System Design	0	0	2	0	2	1	30	30	40
5	PR	5EN552	Activity Based Lab for Embedded System Design	0	0	2	0	2	1	30	30	40
6	HS	5EN553	Presentaiton and Technical Report Writing	0	0	0	1	1	1	30	30	40
7	PC	5EN554	Professional Skills 1	0	0	0	1	1	1	30	30	40
Professional Elective (Theory)												
8	PE	Refer list	Elective 1	3	0	0	0	3	3	20	20	60
9	PE	Refer list	Elective 2	3	0	0	0	3	3	20	20	60
AICTE Mandatory Courses @												
10	MC	5IC502	Constitution of India	2	0	0	0	2	0	20	20	60
Value Added Professional Courses #												
--												
Value Added Life-Skill Courses #												
--												
			Total	14	0	4	4	22	18			

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Elective Course List for F.Y. M.Tech. (Electronics Engineering) Sem-I AY 2021-22

Sr.No.	Track	Course Code	Course Name
Elective 1			
1	Communication and Signal Processing	5EN511	Advanced Digital Signal Processing
2	Embedded and VLSI	5EN512	Digital VLSI Design
Elective 2			
1	Communication and Signal Processing	5EN513	Biomedical Signal Processing
2	Embedded and VLSI	5EN514	Embedded Linux Programming

Notes:

For Lab courses: There shall be only internal continuous assessment (LA1, LA2, ESE). LA1 and LA2 together shall be Lab ISE. The ESE is a separate head of passing.
For Theory courses: There shall be two tests (T1 and T2) and one ESE. The ESE is a separate head of passing.

\# The Value Added Courses are Optional Courses. The mode of teaching (LTPI) is decided by the resource person.
   The credits earned from these courses will be shown on grade card. For SGPA and CGPA calculation, these courses will be excluded.
   The list of Value added courses will be updated from time to time. The courses may be on paid basis. These courses will be offered as per availability of faculty.

@ Minimum two AICTE mandatory courses need to be completed for award of degree.

For further details, refer to Academic and Examination rules and regulations.

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Credit System for F.Y. M.Tech. (Electronics Engineering) Sem-II AY 2021-22

Sr.No.	Category	Course Code	Course Name	L	T	P	I	Hrs	Cr	T1/LA1	T2/LA2	ESE
			Professional Core (Theory)									
1	PC	5EN521	RTOS Based System Design	3	0	0	0	3	3	20	20	60
2	PC	5EN522	Wireless Sensor Networks and IoT	3	0	0	0	3	3	20	20	60
			Professional Core (Lab)									
3	PR	5EN571	Activity Based Lab for RTOS Based System Design	0	0	2	0	2	1	30	30	40
4	PR	5EN572	Activity Based Lab for Wireless Sensor Networks and IoT	0	0	2	0	2	1	30	30	40
5	PR	5EN573	Industrial Project	0	0	0	2	2	2	30	30	40
6	PC	5EN574	Professional Skills 2	0	0	0	1	1	1	30	30	40
			Professional Elective (Theory)									
7	PE	Refer list	Elective 3	2	0	0	0	2	2	20	20	60
8	PE	Refer list	Elective 4	2	0	0	0	2	2	20	20	60
			Professional Elective (Lab)									
9	PR	Refer list	Activity Based Elective Lab 1	0	0	2	0	2	1	30	30	40
			Open Elective									
10	OE	Refer list	Open Elective	2	0	0	0	2	2	20	20	60
			AICTE Mandatory Courses @									
11	MC	5IC501	Value Education	2	0	0	0	2	0	20	20	60
			Value Added Professional Courses #									
			--									
			Value Added Life-Skill Courses #									
			--									
			Total	14	0	6	3	23	18			

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Elective Course List for F.Y. M.Tech. (Electronics Engineering) Sem-II AY 2021-22

Sr.No.	Track	Course Code	Course Name
Activity Based Elective Lab 1			
1	Communication and Signal Processing	5EN575	Image Processing and Pattern Recognition Lab
2	Embedded and VLSI	5EN576	Analaog VLSI Design Lab
3	Communication and Signal Processing	5EN577	Robotics and Artificial Intelligence Lab
4	Embedded and VLSI	5EN578	Embedded Linux System design Lab
Elective 3			
1	Communication and Signal Processing	5EN523	Image Processing and Pattern Recognition
2	Embedded and VLSI	5EN524	Analaog VLSI Design
Elective 4			
1	Communication and Signal Processing	5EN525	Robotics and Artificial Intelligence
2	Embedded and VLSI	5EN526	Embedded Linux System design

Walchand College of Engineering, Sangli
(Government Aided Autonomous Institute)

Open Elective Course List for F.Y. M.Tech. (Electronics Engineering) Sem-II AY 2021-22

Sr.No.	Offering Dept	Sem	Course Code	Course Name
Open Elective 1				
1	Civil_Env	2	5OE101	Solid Waste Management
2	Civil_Struct	2	5OE102	Structural Health Monitoring
3	Mech_Prod	2	5OE103	Advanced Production systems
4	Mech_Heat	2	5OE104	Waste to Energy
5	Mech_Design	2	5OE105	Industrial Product Design
6	Elect_Power	2	5OE106	Control Techniques for Electrical Drives
7	Elect_Control	2	5OE106	Control Techniques for Electrical Drives
8	CSE	2	5OE109	Machine Learning in Practice
9	IT	2	5OE110	Machine Learning & Applications

Notes:

For Lab courses: There shall be only internal continuous assessment (LA1, LA2, ESE). LA1 and LA2 together shall be Lab ISE. The ESE is a separate head of passing.
For Theory courses: There shall be two tests (T1 and T2) and one ESE. The ESE is a separate head of passing.

\# The Value Added Courses are Optional Courses. The mode of teaching (LTPI) is decided by the resource person.
   The credits earned from these courses will be shown on grade card. For SGPA and CGPA calculation, these courses will be excluded.
   The list of Value added courses will be updated from time to time. The courses may be on paid basis. These courses will be offered as per availability of faculty.

For further details, refer to Academic and Examination rules and regulations.