

**Autonomous Program Structure  
Third Year B. Tech. Fifth Semester  
(Instrumentation and Control)  
Academic Year: 2018-2019 Onwards**

Course Code	Course Title	Teaching Scheme			Examination Scheme				Marks	Credit
		Hours/Week			In Sem	End Sem	Oral	Practical		
		Lecture	Tutorial	Practical						
IN3101	Embedded System Design	3	1	0	50	50	0	0	100	4
IN3102	Control Systems II	3	1	0	50	50	0	0	100	4
IN3103	Control System Components	3	0	0	50	50	0	0	100	3
OEHS3101	Open Elective I	3	0	0	50	50	0	0	100	3
PEIN3101	Programme Elective I	3	0	0	50	50	0	0	100	3
IN3104	Embedded System Design lab	0	0	2	0	0	0	25	25	1
IN3105	Control Systems II lab	0	0	2	0	0	0	25	25	1
IN3106	Control System Components lab	0	0	2	25	0	0	25	25	1
PEIN3102	Programme Elective I lab	0	0	2	0	0	25	0	25	1
IN3107	Lab Practice II	0	0	2	25	0	0	0	25	1
AC3101	Audit Course I	0	0	2	0	0	0	0	0	0
<b>Total</b>		<b>15</b>	<b>2</b>	<b>12</b>	<b>300</b>	<b>250</b>	<b>25</b>	<b>75</b>	<b>625</b>	<b>22</b>
<b>Grand Total</b>		<b>29</b>			<b>625</b>				<b>625</b>	<b>22</b>

<b>OEHS 3101: Open Elective I</b>	<b>PEIN 3101: Programme Elective I</b>
	<b>PEIN 3102: Programme Elective I Lab</b>
1. Entrepreneurship Development	1. Optoelectronic Instrumentation
2. Introduction to Digital Marketing	2. Fundamentals of Biomedical Instrumentation
3. Intellectual Property Rights	3. Power Electronics and Drives
4. Project Management	4. Mechatronics

**AC3101 : Audit Course: Employability Skills Development**

**DEAN ACADEMICS**  
MKSSS's Cummins College  
of Engineering for Women  
Karvenagar, Pune-411052

**Principal**  
MKSSS's Cummins College of Engg.  
For Women, Karvenagar, Pune-52

**APPROVED BY**  
Governing Body Members  
MKSSS's Cummins College  
of Engineering for Women  
Karvenagar, Pune-411052