

**Cummins College of Engineering for Women**  
(An autonomous institute affiliated to Savitribai Phule Pune University)  
Karve Nagar, Pune - 411 052.



**Vision**

**To be globally renowned engineering institute for imparting holistic education and developing professional women leaders in engineering and technology**

**Structure and Syllabus**

of

**T. Y. BTech**

**(Instrumentation and Control Engineering)**

**2023 Pattern [R0]**

## List of Abbreviations

Abbreviation	Title
PC	Programme Core Course
BSC	Basic Science Course
ESC	Engineering Science Course
PE	Programme Elective Course
OE	Open Elective
VSEC	Vocational and Skill Enhancement Course
CC	Co-curricular Courses / Liberal Learning Course
IKS	Indian Knowledge System
VEC	Value Education Course
RM	Research Methodology
INTR	Internship
PROJ	Project
CEP	Community Engagement Project
Mm	Multidisciplinary Minor
AEC	Ability Enhancement course

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## Curriculum for UG Degree Course in BTech. Instrumentation and Control Engineering (Academic Year: 2025-26 Onwards)

### Third Year | Semester-VI

Sr. No.	Course Code	Course Title	Teaching Scheme (Hours/week)			Credits	Examination Scheme			Total Marks
			L	T	P		ISE	ESE	Pr/Or	
1	23PCIN601	Industrial Automation	3	0	0	3	50	50	0	100
2	23PCIN602	System Engineering and Management	3	0	0	3	50	50	0	100
3	23PCIN603	Process Data Analytics	3	0	0	3	50	50	0	100
4	23PCIN604	Process Instrumentation and Control	3	0	0	3	50	50	0	100
5	23PEIN601	Programme Elective Course-II	3	0	0	3	50	50	0	100
6	23MmIN601	Energy Management and Audit	2	0	0	2	25	25	0	50
7	23VSEC601	Data Structures	0	0	4	2	50	0	0	50
8	23PCIN601L	Industrial Automation Lab	0	0	2	1	25	0	25	50
9	23PCIN602L	System Engineering and Management Lab	0	0	2	1	25	0	25	50
10	23PCIN603L	Process Data Analytics Lab	0	0	2	1	25	0	25	50
<b>Total =</b>			<b>17</b>	<b>0</b>	<b>10</b>	<b>22</b>	<b>400</b>	<b>275</b>	<b>75</b>	<b>750</b>

L=Lecture, T=Tutorial, P= Practical, Cr= Credits, ISE =In Semester Evaluation, ESE =End Semester Examination, Pr/Or = Practical/Oral

### 23PEIN601: Programme Elective-II

- Instrumentation in EV
- Building Automation
- Micro Electro Mechanical Systems
- Safety in Automation

Instrumentation and Control Department

**APPROVED BY**  
Secretary Academic Council  
MKSS's Cummins College of Engineering  
For Women, Pune-411052



**APPROVED BY**  
Chairman Academic Council  
MKSS's Cummins College of Engineering  
For Women, Pune-411052