

**Shri G. S. Institute of Technology and Science**  
**23, Park Road, Indore (MP) -452003**  
**Department of Electronics and Instrumentation Engineering**

---

**Agenda for Board of Studies (BOS) Meeting to be held on 30<sup>th</sup> Nov. 2022**

**Date: 24-11-2022**

A Board of Studies (BOS) meeting for faculty in Electronics and Instrumentation Engineering is scheduled to be held in conference room of the department on 30<sup>th</sup> Nov. 2022 at 3.30PM. The agenda for the proposed meeting is as follows.

1. To discuss and approve the changes, if any, suggested by DPAQIC in the scheme and Syllabus of UG course B. Tech. (Electronics and Instrumentation Engineering).
2. To discuss and approve the changes, if any, suggested by DPAQIC in the scheme and Syllabus of PG course M. Tech. (Microelectronics and VLSI Design).
3. To discuss and approve the Course Outcomes (COs), Program Specific Outcomes (PSOs) and Program Educational Objectives (PEOs) for UG and PG courses.
4. Any other item with permission of chair.

Please find it convenient to attend the meeting.



**Prof. R. S. Gadd**  
**Chairman, BOS**  
**Department of Electronics and Instrumentation Engineering**  
**S. G. S. Institute of Technology and Science**  
**INDORE (INDIA)**

Copy to:

1. Prof. S. Vishwakarma, Professor, Electrical Engineering Department, IIT Indore.  
(Expert outside Parent University)
2. Dr. Vaibhav Neema, Assistant Professor, Electronics and Communication Engineering, IET, DAVV, Indore.  
(Expert outside Parent University)
3. Prof. R. B. Pachori, Professor, Electrical Engineering Department, IIT Indore.  
(Expert Nominated by VC)
4. Mr. Anuj Upadhyay, Director, M/S. Farm Electronics Ltd., Electronics Complex, Indore.  
(Expert from Industry)
5. Dr. Bhupendra Reniwal, Assistant Professor, Electrical Engineering Department, IIT Jodhpur.  
(Postgraduate Alumnus)
6. All the regular and contract faculty members in the department with three years of experience.

To,  
The Registrar

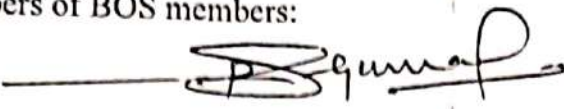


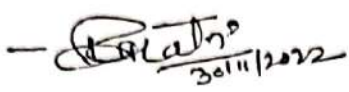

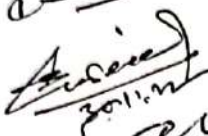



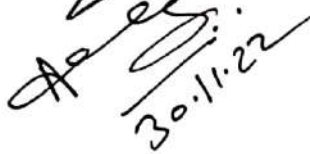
For official intimation to hon. Members





The meeting ended with vote of thanks by Dr. R. S. Gamad, Head of the department.

Signature of members of BOS members:

1. Dr. R. S. Gamad 
2. Dr. D. K. Mishra 
3. Mr. D. S. Ajar 
4. Mr. Rajesh Khatri 
5. Mr. R. C. Gurjar 
6. Dr. Gireesh Soni 
7. Dr. Santosh Vishwakarma 
8. Dr. R. B. Pachori 
9. Dr. Vaibhav Neema 
10. Mr. Anuj Upadhyay 

- Encl.: (i) Updated Scheme and Syllabus of UG (As per NEP-2020)  
(ii) Updated Scheme and Syllabus of PG  
(iii) Approved statements of COs, PEOs and PSOs

**SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE , INDORE**  
**II YEAR B.Tech. (Electronics & Instrumentation Engg.)**  
**II YEAR Diploma (Electronics & Instrumentation Engg.)**

**Semester - III**

S. No.	Subject Category	Subject Code	Subject Name	Hours per Week			Credits		Maximum Marks				
				L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	BSC	MA-	Mathematics - III	3	1	0	4	-	70	30	-	-	100
2	PCC	EI-	Circuit Analysis & Synthesis	3	-	-	3	-	70	30	-	-	100
3	PCC	EI-	Digital Electronics	3	-	-	3	-	70	30	-	-	100
4	PCC	EI-	Electronics Devices & Circuits	3	-	-	3	-	70	30	-	-	100
5	ESC	EI-	Fundamentals of Measurement	3	-	-	3	-	70	30	-	-	100
6	LC (EI)	EI-	Circuit Analysis & Synthesis Lab	-	-	2	-	1	-	-	20	30	50
7	LC (EI)	EI-	Digital Electronics Lab	-	-	2	-	1	-	-	20	30	50
8	LC (EI)	EI-	Electronics Devices & Circuits Lab	-	-	2	-	1	-	-	20	30	50
9	LC (EI)	EI-	Electronics workshop Lab	-	-	2	-	1	-	-	40	60	100
10	HSMC	HU-	Environmental Science	2	-	-	2	-	-	100	0	0	100
<b>TOTAL</b>				<b>17</b>	<b>1</b>	<b>8</b>	<b>18</b>	<b>4</b>	<b>350</b>	<b>250</b>	<b>100</b>	<b>150</b>	<b>850</b>

**Semester - IV**

S. No.	Subject Category	Subject Code	Subject Name	Hours per Week			Credits		Maximum Marks				
				L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	HSMC	HU-	Economics for Engineers	3	-	-	3	-	70	30	-	-	100
2	PCC	EI-	Analog Electronics	3	-	-	3	-	70	30	-	-	100
3	PCC	EI-	Sensors & Transducers	3	-	-	2	-	70	30	-	-	100
4	BSC	MA-	Mathematics - IV	3	1	-	4	-	70	30	-	-	100
5	PCC	EI-	Circuit Design using HDLs	3	-	-	3	-	70	30	-	-	100
7	LC (EI)	EI-	Analog Electronics Lab	-	-	2	-	1	-	-	20	30	50
8	LC (EI)	EI-	Sensors & Transducers Lab	-	-	2	-	1	-	-	20	30	50
9	LC (EI)	EI-	Circuit Design using HDLs Lab	-	-	2	-	1	-	-	20	30	50
10	LC (EI)	EI-	Software Workshop	-	-	2	-	1	-	-	40	60	100
11	MC	HU-	Essence of Indian Knowledge Tradition	2	-	-	2	-	70	30	0	0	100
<b>TOTAL</b>				<b>17</b>	<b>1</b>	<b>8</b>	<b>17</b>	<b>4</b>	<b>420</b>	<b>180</b>	<b>100</b>	<b>150</b>	<b>850</b>

Diploma in Electronics and Instrumentation Engg. will be awarded after acquiring additional 10 credits out of which 6 credits as three months industrial training within five years.

*[Handwritten signatures and dates]*  
 20/11/2022  
 30/11  
 30/11



**SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE , INDORE**  
**III YEAR B.Tech. (Electronics & Instrumentation Engg.)**  
**III YEAR Diploma (Electronics & Instrumentation Engg.)**

**Semester - V**

S. No.	Subject Category	Subject Code	Subject Name	Hours per Week			Credits		Maximum Marks				
				L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	PCC	IT	Data Structure	3	-	-	3	-	70	30	0	0	100
2	PCC	EI	Microprocessor System	3	-	-	3	-	70	30	0	0	100
3	PCC	EI	VLSI Design	3	-	-	3	-	70	30	0	0	100
4	PEC	EI	Program Elective Course - I	3	-	-	3	-	70	30	0	0	100
5	OEC		Open Elective Course - I	3	-	-	3	-	70	30	0	0	100
6	LC (IT)	IT	Data Structure Lab	-	-	2	-	1	-	-	20	30	50
7	LC (EI)	EI	Microprocessor System Lab	-	-	2	-	1	-	-	20	30	50
8	LC (EE)	EI	VLSI Design Lab	-	-	2	-	1	-	-	20	30	50
9	LC-(EI)	EI	Test & calibration Lab	-	-	2	-	1	-	-	40	60	100
10	PROJ	EI	Internship	-	-	2	-	1	-	-	50	-	50
11	HSMC	HU	Indian Constitution	2	-	-	2	-	-	100	-	-	100
<b>TOTAL</b>				<b>17</b>	<b>0</b>	<b>10</b>	<b>17</b>	<b>5</b>	<b>350</b>	<b>250</b>	<b>150</b>	<b>150</b>	<b>900</b>

**Semester - VI**

S. No.	Subject Category	Subject Code	Subject Name	Hours per Week			Credits		Maximum Marks				
				L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	PCC	EI	Filter Design & Simulation	3	-	-	3	-	70	30	0	0	100
2	PCC	EI	High Frequency Engineering	3	-	-	3	-	70	30	0	0	100
3	PCC	EE	Control Systems	3	-	-	3	-	70	30	0	0	100
4	PEC	EI	Program Elective Course - II	3	-	-	3	-	70	30	0	0	100
5	OEC		Open Elective Course - II	3	-	-	3	-	70	30	0	0	100
6	LC (EI)	EI	Filter Design & Simulation Lab	-	-	2	-	1	-	-	20	30	50
7	LC (EE)	EE	Control Systems Lab	-	-	2	-	1	-	-	20	30	50
8	PEC LC (EI)	EI	Program Elective Course - II Lab	-	-	2	-	1	-	-	20	30	50
9	PROJ	EI	Minor Project	-	-	4	-	2	-	-	50	0	50
10	HSMC	IP	Industrial Engineering & Management	2	-	-	2	-	70	30	0	0	100
<b>TOTAL</b>				<b>17</b>	<b>0</b>	<b>10</b>	<b>17</b>	<b>5</b>	<b>420</b>	<b>180</b>	<b>110</b>	<b>90</b>	<b>800</b>

Vocational degree in Electronics & Instru Engg shall be awarded after acquiring additional 10 credits out of which 6 credits as three months industrial training within five years

*[Handwritten signatures and notes]*





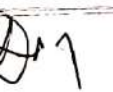


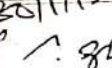

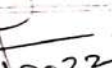
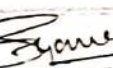
**RI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE**  
**IV YEAR B.Tech. (Electronics & Instrumentation Engg.)**  
**IV YEAR Diploma (Electronics & Instrumentation Engg.)**

Semester - VII				Hours per Week			Credits		Maximum Marks				
S. No.	Subject Category	Subject Code	Subject Name	L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	PCC	EI	Process Instrumentation	3	-	-	3	-	70	30	-	-	100
2	PCC	BM	Medical Instrumentation	3	-	-	3	-	70	30	-	-	100
3	PCC	EI	Fiber Optics and Photonics	3	-	-	3	-	70	30	-	-	100
4	PEC	EI	Program Elective Course - III	3	-	-	3	-	70	30	-	-	100
5	PEC	EI	Program Elective Course - IV	3	-	-	3	-	70	30	-	-	100
6	LC(EI)	EI	Process Instrumentation Lab	-	-	2	-	1	-	-	20	30	50
7	LC(EI)	EI	Medical Instrumentation Lab	-	-	2	-	1	-	-	20	30	50
8	LC(EE)	EI	Fiber Optics and Photonics Lab	-	-	2	-	1	-	-	20	30	50
9	PROJ	EI	Major Project	-	-	8	-	4	-	-	40	60	100
<b>TOTAL</b>				<b>15</b>	<b>0</b>	<b>14</b>	<b>15</b>	<b>7</b>	<b>350</b>	<b>150</b>	<b>100</b>	<b>150</b>	<b>750</b>

Semester - VIII				Hours per Week			Credits		Maximum Marks				
S. No.	Subject Category	Subject Code	Subject Name	L	T	P	Th	Pr	Theory		Practical		Total
									Th.	CW	SW	Pr.	
1	PEC	EI	Program Elective Course - V	3	-	-	3	-	70	30	0	0	100
2	PEC	EI	Program Elective Course - VI	3	-	-	3	-	70	30	0	0	100
3	PROJ	EI	Industrial Training / Internship	-	-	16	-	8	-	-	100	0	100
4	PROJ	EI	Research Work	-	-	12	-	6	-	-	40	60	100
5	MC	EI	Research Paper*	2	-	-	-	-	-	50	-	-	50
<b>TOTAL</b>				<b>8</b>	<b>0</b>	<b>28</b>	<b>6</b>	<b>14</b>	<b>140</b>	<b>110</b>	<b>140</b>	<b>60</b>	<b>450</b>

\* Minimum one research paper in the year should be submitted for publication in a Reputed Conference or Journal

CW (Class Work) marks will be based on Assignments and/or quizzes  
 SW (Sessional Work) marks will be based on Performance in Practical + final internal submission  
 Pr (Practical End semester Exam Viva voce) marks will be based on Quiz and or Viva Voci Examination by External Examiner  
 All the evaluations will be done on the basis of Rubrics prepared for that purpose.  
 Duration of Internship is minimum 20xPractical hours (e.g. 20x16hours=320hours=40 working days for 8hours per day)  
 A minor certificate will be awarded if additional 20 credits are earned in a particular area/specialisation


30/11/2022      30/11/2022      30/11/2022



List of Elective courses in Electronics & Instrumentation Engineering

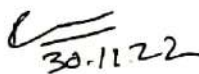
Program Electives


- PEC-I 1 Analog and Digital Communication (I) 5th Sem  
2 Signals & Systems  
3 Smart Sensors
  
- PEC-II 1 Microcontroller and Embedded System (II)-6th Sem  
2 Analog Integrated Circuits  
3 Analytical Instrumentation
  
- PEC-III 1 VLSI technology (I) 7th Sem  
2 Mechatronics  
3 Digital Signal Processing
  
- PEC-IV 1 Power Electronics (II) 7th Sem  
2 Radio Frequency Integrated Circuits  
3 Advanced Control Systems
  
- PEC-V 1 Internet of Things(I) 8th Sem  
2 Computer Networks  
3 Digital Image Processing
  
- PEC-VI 1 Automation in Instrumentation(II) 8th Sem  
2 Process Control  
3 Intelligent Instrumentation

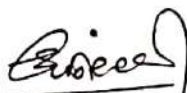
  
30/11/2022

  
30/11/22


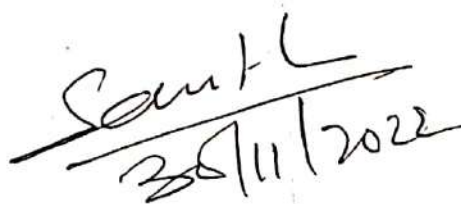
  
30/11/2022

  
30.11.22

  
30/11/22

  
30.11.22

  
30.11.22

  
  
30/11/2022

