



**Department: Pure and Applied Physics**

**List of Programmes having Components of field**

Sr. No.	Programme Code	Programme Name	Academic Year
01.	B.Sc. (Electronics)	Dissertation/Project work followed by seminar (PS/ELEC/PD)	2020-2021



### Minutes of Meetings (MoM) of Board of Studies (BoS)

**Academic Year : 2020-21**

**School : School of Physical Sciences**

**Department : Pure and Applied Physics**

**Date and Time : July 13, 2018 - 11:30 AM; July 18, 2018 - 5:00 PM**

**Venue : Smart Class Room**

The scheduled meetings of member of Board of Studies (BoS) of Department of Pure and Applied Physics, School of Studies of Physical Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur, were held to design and discuss the B. Sc. (Electronics) Third year (V and VI Semesters), scheme and syllabi.

The following members were present in the meeting:

1. Prof. P K. Bajpai
2. Dr. H. S. Tewari
3. Prof. S. B. Kondawar (External Member)
4. Dr. M. N. Tripathi
5. Dr. P. Thakur
6. Dr. R. K. Pandey
7. Dr. T. G. Reddy
8. Dr. R. P. Prajapati
9. Dr. A. K. Gupta
10. Dr. M. P. Sharma
11. Dr. P. Das
12. Dr. T. Trivedi
13. Dr. S. P. Patel
14. Prof. R. Dhar (External member)

**Signature & Seal of HoD**



**School of Physical Sciences: B.Sc. Hon's (Electronics)**

Semester	Course Opted	Course Code	Name of the course	Credit	Hour / week
I	Core-1	PS/ELEC/C-101L	Basic Circuit Theory and Network Analysis	4	4
	Core-1 Practical	PS/ ELEC/C-101P	Basic Circuit Theory and Network Analysis Lab	2	4
	Core-2	PS/ ELEC/C-102L	Mathematics Foundation for Electronics	4	4
	Core-2 Practical	PS/ ELEC/C-P-102P	Mathematics Foundation for Electronics Lab	2	4
	Generic Elective -I (GE- 1A)	PS/ELEC/GE-101	To be opted from the pool*	4	4
	Generic Elective - Practical	PS/ELEC/GE-P-101	GE-101 practical as opted	2	4
	Ability Enhancement Compulsory Course (AECC)	PS/ ELEC/AE-101/EC	English Communication / MII. (Hindi Communication)	4*	4
ECA	Open elective (Optional)	ECA-Extracurricular activity/ Tour, Field visit/ Industrial training/ NSS/ Swachhta/ vocational Training/ Sports/ others	2	(2)	
		TOTAL	24	28	
II	Core-3	PS/ ELEC /C-203L	Semiconductor Devices	4	4
	Core-3 Practical	PS/ ELEC /CP-203P	Semiconductor Devices Lab	2	4
	Core-4	PS/ ELEC /C-204L	Applied Physics	4	4
	Core-4 Practical	PS/ ELEC /CP-204P	Applied Physics Lab	2	4
	Generic Elective -2 (GE-IB)	PS/ ELEC /GE-202/	GE-102 (second course of the same subject as opted in GE-101)	4	4
	Generic Elective - Practical	PS/ ELEC /GE-P-202/	GE-202 practical as opted	2	4
	Ability Enhancement Compulsory Course (AECC)	PS/ ELEC /AE-201/ES	Environmental Science	4*	4
	ECA	Optional elective *	ECA-Extracurricular activity/ Tour, Field visit/ Industrial training/ NSS/ Swachhta/ vocational Training/ Sports/ others	2	(2)
		Total	24	28	

*Handwritten signatures and notes in blue ink, including the name 'Dr. Pratik' and other illegible text.*



SUMMER Internship: 15 days		Optional elective	Swayam Swachhta / NSS / Industrial/ others	2	100
III	Core-5	PS/ ELEC /C-301L	Electronic Circuits	4	4
	Core -5 Practical	PS/ ELEC /C-301P	Electronic Circuits Lab	2	4
	Core -6	PS/ ELEC /C-302L	Digital Electronics and VHDL	4	4
	Core -6 Practical	PS/ ELEC /C-302P	Digital Electronics and VHDL Lab	2	4
	Core -7	PS/ ELEC /C-303L	C Programming and Data Structures	4	4
	Core -7 Practical	PS/ ELEC /C-303P	C Programming and Data Structures Lab	2	4
	Generic Elective -3 (GEII-A)		To be opted from the pool of GE	4	4
	Generic Elective - Practical			2	4
	Skill Enhancement Course (SEC -1)		To be opted from the pool of SE courses**	4*	2 (4)
			Total	28	34
IV	Core-8	PS/ ELEC /C-401L	Operational Amplifiers and Applications	4	4
	Core -8 Practical	PS/ ELEC /C-401P	Operational Amplifiers and Applications Lab	2	4
	Core -9	PS/ ELEC /C-402L	Signals and Systems	4	4
	Core -9 Practical	PS/ ELEC /C-402P	Signals and Systems Lab	2	4
	Core -10	PS/ ELEC /C-403L	Electronic Instrumentation	4	4
	Core -10 Practical	PS/ ELEC /C-403P	Electronic Instrumentation Lab	2	4
	Generic Elective -4 (GEII-B)		To be opted from the pool of Generic courses	4	4
	Generic Elective - Practical			4	4
	Skill Enhancement Course (SEC -2)		To be opted from the pool of SE courses	4*	2 (4)
			TOTAL	28	34
SUMMER Internship: 15 days		Optional elective	Swayam Swachhta / NSS / Industrial/ others	2	100
V	Core-11	PS/ ELEC /C-501L	Microprocessors and Microcontrollers	4	4
	Core -11 Practical	PS/ ELEC /C-501P	Microprocessors and Microcontrollers Lab	2	4
	Core -12	PS/ ELEC /C-502L	Electromagnetics	4	4
	Core -12 Practical	PS/ ELEC /C-502P	Electromagnetics Lab	2	4

*Handwritten notes and signatures:*  
 Prof. Dr. ...  
 Prof. Dr. ...  
 Prof. Dr. ...  
 Prof. Dr. ...  
 Prof. Dr. ...



	Discipline Specific Elective (DSE-1)	PS/ELEC/DSE-501L	DSE-1	4	4
	DSE-1 - Practical	PS/ELEC/DSE-501P	DSE-1 Lab	2	4
	Discipline Specific Elective (DSE-2)	PS/ELEC/DSE-502L	DSE-2	4	4
	DSE-2 - Practical	PS/ELEC/DSE-502P	DSE-2 Lab	2	4
			TOTAL	24	32
VI	Core-13	PS/ ELEC /C-601L	Communication Electronics	4	4
	Core -13 Practical	PS/ ELEC /C-601P	Communication Electronics Lab	2	4
	Core -14	PS/ ELEC /C-602L	Photonics	4	4
	Core -14 Practical	PS/ ELEC /C-602P	Photonics Lab	2	4
	Discipline Specific Elective (DSE-3)	PS/ELEC/DSE-503L	DSE-3	4	4
	DSE-3 - Practical	PS/ELEC/DSE-503P	DSE-3 Lab	2	4
	Discipline Specific Elective (DSE-4) + DSE-4 - Practical	PS/ELEC/PD		4+2=6	8
	Or Dissertation/ Project work followed by seminar			5+1=6	
			TOTAL	24	32
			<b>TOTAL CREDITS</b>	<b>152 + 4 (SI)</b>	

As per UGC CBCS guidelines, University / departments have liberty to offer GE and SEC courses offered by any department to students of other departments. The No. of GE course is four. One GE course is compulsory in first 4 semesters each. In present scheme it is proposed to have minimum two GE courses (from one subject) in first two semesters after which student shall change two GE for another subject in III<sup>rd</sup> and IV<sup>th</sup> semester, so that all the student can have exposure of one additional subject. (Subject to approval by the competent authority).

*Handwritten notes and signatures:*  
Date 18/7/20  
Approved for  
T. S. Singh  
Principal





## Students Undertaking Field Projects / Research Projects / Internships

**Department : Pure and Applied Physics**

**Programme Name : B.Sc. Electronics**

**Academic Year : 2020-21**

### **List of students undertaking Field Projects/Projects / Internships**

Sr. No.	Name of the Student	Title of the Project / Internship along with the Name of the Organization (where Project / Internship was carried out)	Link of Certificate
01.	Abhay Masih	Full Adder Implementation With Bread Board/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062222_Abhay%20masih.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062222_Abhay%20masih.pdf</a>
02.	Abhishek Singh	Greenhouse Environment Monitor And Control System/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062351_Abhishek%20singh.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062351_Abhishek%20singh.pdf</a>
03.	Abhjeet Singh Kshatri	Fire Alarm Thermister/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062309_Abhjeet%20Singh%20kshatri.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062309_Abhjeet%20Singh%20kshatri.pdf</a>
04.	Akash Gupta	Mechanical Ventilator/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062423_Akash%20gupta.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062423_Akash%20gupta.pdf</a>
05.	Akash Khanna	Accident Prevention Road Safety Model Based On IR Sensor/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062458_Akash%20khanna.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062458_Akash%20khanna.pdf</a>



06.	Ankita Jaiswal	Automatic Handwash Dispenser Using Ardiuno/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062534_Ankita%20jaiswal.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062534_Ankita%20jaiswal.pdf</a>
07.	Annu Dewangan	A Review On Deposition And Characterization On Magnesium Doped In Zinc Oxide Thin Film For Optoelectronic Application/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062621_Annu%20dewangan.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062621_Annu%20dewangan.pdf</a>
08.	Anuj Dikshit	Single Axis Solar Tracker/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062706_Anuj%20dikshit.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062706_Anuj%20dikshit.pdf</a>
09.	Ashutosh Kumar	Electronic Bug Zapper /GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062804_Ashutosh%20Kumar.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022062804_Ashutosh%20Kumar.pdf</a>
10.	Bhupendra Deep	IR Proximity Sensor/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063233_Bhupendra%20Deep.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063233_Bhupendra%20Deep.pdf</a>
11.	Goutam Kumar	Scanning Tunneling Microscope/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063323_Goutam%20Kumar.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063323_Goutam%20Kumar.pdf</a>
12.	K Girish Kumar	Full Wave Rectifier/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063401_K%20Girish%20Kuma">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063401_K%20Girish%20Kuma</a>



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13.	Kamlesh Sahu	Automatic Room High Controller /GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063502_Kamlesh%20sahu.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063502_Kamlesh%20sahu.pdf</a>
14.	Mamta Paikra	Arduino Distance Detector Using LED And Ultrasonic Sensor/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063532_Mamta%20paikra.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063532_Mamta%20paikra.pdf</a>
15.	Mayank Kumar Sahu	Temperature Controlled DC Fan Using Thermistor/Ggv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063605_Mayank%20kumar%20sahu.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063605_Mayank%20kumar%20sahu.pdf</a>
16.	Muskan Agrawal	A Review On Deposition And Characterization On Sodium Doped Zinc Oxide Thin Film For Optoelectronic Application Using Sol Gel Spin Coating Method/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063640_Muskan%20agrawal.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063640_Muskan%20agrawal.pdf</a>
17.	Nikhil Sharma	Automatic Traffic Light Control /GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063731_Nikhil%20Sharma.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063731_Nikhil%20Sharma.pdf</a>
18.	Nilesh Patel	Water Overflow Alarm/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063805_Nilesh%20patel.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063805_Nilesh%20patel.pdf</a>
19.	Nitish Singh	FM Transmitter/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063848_N">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063848_N</a>





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20.	Pranshu Jaiswal	Solar Mobile Charger/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063926_Pranshu%20jaiswal.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022063926_Pranshu%20jaiswal.pdf</a>
21.	Sukanya Sarkar	Electronic Vehicle/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022064033_sukanya%20sarkar.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022064033_sukanya%20sarkar.pdf</a>
22.	Sushil Patel	"Digital Thermometer Using OP-AMP 741 IC"/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022064112_sushil%20patel.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022064112_sushil%20patel.pdf</a>
23.	Vertika Singh Banafer	Automatic Room Light Controller With Bidirectional Visitor Counter/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022064145_Vertika%20singh%20banefer.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022064145_Vertika%20singh%20banefer.pdf</a>
24.	Vidyashree Shriwastaw	Diode -Transistor Logic/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022064214_Vidyashree%20shrivastaw.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/06292022064214_Vidyashree%20shrivastaw.pdf</a>