



**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)	2021-2022



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

**Academic Year : 2021-22**

**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:*  
 Dr. [Signature]  
 Dr. [Signature]  
 Dr. [Signature]  
 Dr. [Signature]



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. Anil Kumar Singh  
 Prof. Dr. Anil Kumar Singh  
 Prof. Dr. Anil Kumar Singh  
 Prof. Dr. Anil Kumar Singh  
 Prof. Dr. Anil Kumar Singh



	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			Or 5+1=6		
				TOTAL	24	32
				TOTAL CREDITS	152 + 4 (SI)	

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:*  
Date 10/7/20  
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 : 2021-22**

### 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.	Abhishek Sahu	Seven Segment Counter/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022023827_Abhishek%20sahu.pdf">ggu.ac.in/Admin/Files/DepartmentDocument/08222022023827_Abhishek%20sahu.pdf</a>
02.	Aditya Chandrakar	Non Chargeable Power Bank/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024142_Aditya%20Chandrakar.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024142_Aditya%20Chandrakar.pdf</a>
03.	Akanksha Patel	Study Of Logic Gates/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024332_Akanksha%20patel.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024332_Akanksha%20patel.pdf</a>
04.	Alok Joshi	Automatic Street Light Control System/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024501_Alok%20joshi.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024501_Alok%20joshi.pdf</a>
05.	Ankit Gupta	Anti Sleep Alarm/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024647_Ankit%20Gupta.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024647_Ankit%20Gupta.pdf</a>
06.	Atul Kumar	Temperature Controller DC Fan Using Thermistor/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024907_Atul%20kumar.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022024907_Atul%20kumar.pdf</a>
07.	Ayan Thakur	Safe Transportation Rout/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022</a>



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08.	Dependra Verma	Uses Of Bridge Rectifier/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022025430_Dependra%20verma.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022025430_Dependra%20verma.pdf</a>
09.	Dewendra Dewangan	Regulated Power Supply/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022025705_dewendra%20dewangan.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022025705_dewendra%20dewangan.pdf</a>
10.	Dharmesh Darshan	Diode Transistor Logic/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022025819_Dharmesh%20darshan.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022025819_Dharmesh%20darshan.pdf</a>
11.	Himalay Prasad	Traffic Light System Without Microcontroller / GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022031802_Himalay%20prasad.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022031802_Himalay%20prasad.pdf</a>
12.	Janardan Rathore	Sprctroscopy And Its Application/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032011_janardan%20rathore.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032011_janardan%20rathore.pdf</a>
13.	Jay Kumar Yadaw	RC Circuit To Provide Electricity During Power Outages/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032116_Jay%20Kumar%20yadaw.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032116_Jay%20Kumar%20yadaw.pdf</a>
14.	Kamal Singh	Simple Alarm System/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032221_Kamal%20singh.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032221_Kamal%20singh.pdf</a>
15.	Karra Manisha	Light Fidelity/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032400_Karra%20Manisha.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032400_Karra%20Manisha.pdf</a>
16.	Lakshya Kumar	RC Phase Shift Oscillator Using 741op Amp/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022</a>



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17.	Lorik Chandra	Anti Theft Laser Based Security Alarm System/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032609_Lorik%20Chand%20Suryavanshi.pdf">https://www.ggu.ac.in/ Admin/Files/Departme ntDocument/08222022 032609_Lorik%20Chan d%20Suryavanshi.pdf</a>
18.	Nandini Patel	Automatic Street Light Controle Using LDR/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032725_Nandini%20pa&lt;br/&gt;tel.pdf">https://www.ggu.ac.in/ Admin/Files/Departme ntDocument/08222022 032725_Nandini%20pa tel.pdf</a>
19.	Nikita Mehar	Smoke Detector And Alarm System/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022032845_Nikita%20meh&lt;br/&gt;ar.pdf">https://www.ggu.ac.in/ Admin/Files/Departme ntDocument/08222022 032845_Nikita%20meh ar.pdf</a>
20.	Prachi Kesharwani	Digital Clock/GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022033034_Prachi%20kes&lt;br/&gt;harwani.pdf">https://www.ggu.ac.in/ Admin/Files/Departme ntDocument/08222022 033034_Prachi%20kes harwani.pdf</a>
21.	Pafull Vaishnav	Automatic Open Close Door System Using ARDUINO UNO/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022033327_Prafu&lt;br/&gt;l%20vaishnav.pdf">https://www.ggu.ac.i n/Admin/Files/Depar tmentDocument/082 22022033327_Prafu l%20vaishnav.pdf</a>
22.	Prasoon Pathak	Object Counter/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022033450_Prasoo&lt;br/&gt;n%20pathak.pdf">https://www.ggu.ac.i n/Admin/Files/Depar tmentDocument/082 22022033450_Prasoo n%20pathak.pdf</a>
23.	Pratiksha Sahu	Logic Gates Using Transistor/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022033612_Pratik&lt;br/&gt;sha%20sahu.pdf">https://www.ggu.ac.i n/Admin/Files/Depar tmentDocument/082 22022033612_Pratik sha%20sahu.pdf</a>
24.	Priyank Singh	Virtual Laboratory And Virtual Learning/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022033738_Priyan&lt;br/&gt;k%20singh.pdf">https://www.ggu.ac.i n/Admin/Files/Depar tmentDocument/082 22022033738_Priyan k%20singh.pdf</a>
25.	Rakesh Kumar Dhurwe	Automatic Streat Light Control/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022033840_Rakesh%20Ku">https://www.ggu.ac.in/ Admin/Files/Departme ntDocument/08222022 033840_Rakesh%20Ku</a>





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26.	Ramesh Kumar Sahu	BCD To 7-Segment Decoder Circuit/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034012_Ramesh%20Kumar%20sahu.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034012_Ramesh%20Kumar%20sahu.pdf</a>
27.	Rekha Kanwar	Water Level Indicator/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034217_Rekha%20kanwar.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034217_Rekha%20kanwar.pdf</a>
28.	Ritesh Kumar	Voltage Source Meter/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034335_Ritesh%20Kumar.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034335_Ritesh%20Kumar.pdf</a>
29.	Rupesh Sahu	To Designing A Simple Audio Amplifier/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034459_Rupesh%20sahu.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034459_Rupesh%20sahu.pdf</a>
30.	Samina	Cell Phone Detector/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034602_Samina.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034602_Samina.pdf</a>
31.	Samridhi Goutam	Converting AC To DC Using Full Wave Rectifier/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034717_Samridhi%20goutam.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034717_Samridhi%20goutam.pdf</a>
32.	Sourabh	Dual DC Power Supply/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034859_Sourabh.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022034859_Sourabh.pdf</a>
33.	Shobha Gupta	Audio Power Amplifier/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035028_Shobha%20gupta.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035028_Shobha%20gupta.pdf</a>
34.	Shruti Sharma	Automatic ON-OFF Light Switch Using Photo Transistor/ GGv	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035215_Shruti%20Sharma.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035215_Shruti%20Sharma.pdf</a>



35.	Siddharth	Function Generator/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035321_Siddharth.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035321_Siddharth.pdf</a>
36.	Subodh	Automatic Hand Sanitizer Using IR Sensor To Prevent The Disease Of Corona Virus/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035434_Subodh.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035434_Subodh.pdf</a>
37.	Suraj Maravi	DC To AC Converter/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035624_Suraj%20maravi.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035624_Suraj%20maravi.pdf</a>
38.	Tejshwani Khatic	Battery Charger Circuit Using SCR/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035741_Tejshwini%20khatik.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035741_Tejshwini%20khatik.pdf</a>
39.	Yashoda Nag	Fire Alarm Device Using Sensor/ GGV	<a href="https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035928_Yashoda%20nag.pdf">https://www.ggu.ac.in/Admin/Files/DepartmentDocument/08222022035928_Yashoda%20nag.pdf</a>

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बिलासपुर (छ.ग.)/Bilaspur (C.G.)