



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) | 2018-2019 |



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

Academic Year: 2018-19

School : School of Physical Sciences

Department : Pure and Applied Physics

Date and Time: December 12, 2016 - 11:30 AM

Venue : Smart Class Room

The scheduled meeting of member of Board of Studies (BoS) of Department of Pure and Applied Physics, School of Studies of Physical Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur, was held to design and discuss the B. Sc. (Electronics), scheme and syllabi.

The following members were present in the meeting:

- 1. Dr. R. P. Prajapati
- 2. Dr. M. N. Tripathi
- 3. Dr. R. K. Pandey
- 4. Dr. Parijat Thakur
- 5. Dr. H. S. Tewari
- 6. Prof. D. P. Ojha
- 7. Prof. P. K. Bajpai

The committee discussed and approved the scheme and syllabi.

Signature & Seal of HoD



Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

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

| Semester | Course Opted | Course Code | Name of the course | Credit | Hour |
|----------|---|-----------------------------|--|--------|------|
| | Core-I | PS/ELEC/C-101L | Basic Circuit Theory and Network Analysis | - 14 | 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 -1 (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 / MIL (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 |
| | Core-3 | PS/ELEC/C-2031. | 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 |
| II I | 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 | 42 | 4 |
| | ECA | Optional elective | ECA-Extracurricular activity/ Tour, Field visit/ Industrial training/ NSS/ Swachhtu/ vocational Training/ Sports/ others | 2 | (2) |
| | | | Total | 24 | 28 |



| SUMMER Internship: 15 days | | Optional elective Swayam Swachhta / NSS / Industrial/ others | | -82 | 100 |
|----------------------------|--|--|--|-----|-------|
| | 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 |
| HI | 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 | | A STORE STATE OF THE STATE OF T | 2 | - 4 |
| | Skill Enhancement Course (SEC + 1) | | To be opted from the pool of SE courses** | 4* | 2 (4) |
| | - Contraction of the Contraction | | Total | 28 | 34 |
| | Comp-8 | PS/ ELEC /C-401L | G 7 11 75 11 1 | - | |
| | Core -8 Practical | The state of the s | Operational Amplifiers and Applications | 4 | 4 |
| | Core -9 | PS/ ELEC /C-401P PS/ ELEC /C-402L | Operational Amplifiers and Applications Lab | - 2 | 4 |
| | Core -9 Practical | PS/ ELEC /C-402P | Signals and Systems Signals and Systems Lab | 4 | 4 |
| | Core - 10 | PS/ ELEC /C-403L | Electronic Instrumentation | - 6 | 4 |
| IV | Core -10 Practical | PS/ ELEC /C-403P | Electronic Instrumentation | 2 | 1 |
| ** | Generic Elective -4 (GEII-B) | PAY ELECT / C-403P | POSSESSE SERVICE SERVI | 4 | 1 2 |
| | Generic Elective - Practical | | To be opted from the pool of Generic courses | 4 | 4 |
| | Skill Enhancement Course (SEC -2) | | To be opted from the pool of SE courses | 4* | 2(4) |
| | 45000.00 | | TOTAL | 28 | 34 |
| SUMA | IER Internship: 15 days | Optional elective | Swayam Swachhta / NSS / Industrial/ others | 2 | 100 |
| | 727 | Tearrest various services | 120 | | |
| | Core-I1 | PS/ ELEC /C-501L | Microprocessors and Microcontrollers | -4 | 4 |
| V | 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 |



Guru Ghasidas Vishwavidyalaya (A.Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

| VI | | | TOTAL. | 24 | 32 |
|----|--|------------------|-------------------------------|----------------------|-----|
| | Discipline Specific Elective (DSE-4) + DSE-4 - Practical Or Dissertation/ Project work followed by seminar | PS/ELEC/PD | ON PERIOD | 4+2=6 Or 5+1=6 | 8 |
| | DSE-3 - Practical | PS/ELEC/DSE-503P | DSE-3 Lab | 2 | - 4 |
| | Discipline Specific Elective (DSE-3) | PS/ELEC/DSE-503L | DSE-3 | 4 | 4 |
| | Core -14 Practical | PS/ ELEC /C-602P | Photonics Lab | 2 | 4 |
| | Core -14 | PS/ ELEC /C-602L | Photonics | 4 | - 4 |
| | Core -13 Practical | PS/ ELEC /C-601P | Communication Electronics Lab | 2 | - 4 |
| | Core-13 | PS/ELEC/C-601L | Communication Electronics | 4 | - 4 |
| | | | TOTAL | 24 | 32 |
| | DSE-2 - Practical | PS/ELEC/DSE-502P | DSE-2 Lab | 2 | 4 |
| | Discipline Specific Elective a (DSE-2) | PS/ELEC/DSE-502L | DSE-2 | :4: | 4 |
| | DSE-1 - Practical | PS/ELEC/DSE-501P | DSE-1 Lab | 2. | -4 |
| | Discipline Specific Elective (DSE-1) | PS/ELEC/DSE-501L | DSE-1 | 4 | - 4 |

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 Ill⁶⁰ and IV⁶¹ semester, so that all the student can have exposure of one additional subject. (Subject to approval by the competent authority).

Bigins know the





Students Undertaking Field Projects / Research Projects / Internships

Department : Pure and Applied Physics

Programme Name : B.Sc. Electronics

Academic Year: 2018-19

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. | Aditi Singh Kshatri | Polic siren / GGV Bilaspur | |
| 02. | Alankar Soni | Music rhythm operated LED/ GGV Bilaspur | |
| 03. | Anjali Patel | Laser security system using LM 358 and NE555 timer IC/ GGV Bilaspur | |
| 04. | Anupat Gupta | Automatic traffic light control/ GGV Bilaspur | First Letter of Each Word should be Capital |
| 05. | Ashish Patel | Non-contact AC voltage detector/ GGV Bilaspur | |
| 06. | Brij Kishor Dhobhi | Fire alarm/ GGV Bilaspur | |
| 07. | Chandra Prakash Sahu | Fire alarm using thermistor/ GGV Bilaspur | |
| 08. | Dipesh Bharwaj | Full wave rectifier/ GGV Bilaspur | |
| 09. | Digeswar Rajput | A cell phone detector/ GGV Bilaspur | |
| 10. | Deepshikha Painkara | Flash type analog to digital converter/ GGV Bilaspur | |
| 11. | Gopi Chand Yadav | Clap Switch/ GGV Bilaspur | |
| 12. | Heeramani | Construction of mini invertor/ GGV Bilaspur | |
| 13. | Jaya Kaushik | Flame detector alarm system/ GGV Bilaspur | |
| 14. | Kanha Sahu | Smart home light/ GGV Bilaspur | |
| 15. | Khilesh Dewangan | Touch sensor using 555 timer IC/ GGV Bilaspur | |
| 16. | Krishnakant | Wireless power transmission/ GGV Bilaspur | |
| 17. | Kuldeep Dhurwey | Infrared object counter/ GGV Bilaspur | |





| 18. | Lamodar Patel | LDR security alarm/ GGV Bilaspur | |
|-----|-----------------------|--|--|
| 19. | Lokesh Kumar Dewangan | Grass cutter with DC power supply/ GGV Bilaspur | |
| 20. | Manisha Dewangan | AC voltage detector/ GGV Bilaspur | |
| 21. | Priya Rai | Sine wave generator of pam/ GGV Bilaspur | |
| 22. | Rakesh Divya | Automatic night lamp using LDR/ GGV Bilaspur | |
| 23. | Satendra | Password security for electronic devices/ GGV Bilaspur | |
| 24. | Saurabh Verma | Electronic piano/ GGV Bilaspur | |
| 25. | Shankar Bhardwaj | Piezo electric transducer/ GGV Bilaspur | |
| 26. | Sharad Mishra | Single Axis solar tracker/ GGV Bilaspur | |
| 27. | Sheetal Shrivastava | Short range radar system Rangefinder/ GGV Bilaspur | |
| 28. | Vijay Kumar Sahu | IR remote control on/off switch/ GGV Bilaspur | |
| 29. | Vishal Singh | Clap switch/ GGV Bilaspur | |
| 30. | Yaman Singh Thakur | FM modulation and reception technique/ GGV Bilaspur | |