

B.Sc. (Electronics) Syllabus, G.C.W Parade College Jammu  
CBCS Pattern in Semester System (w.e.f 2017-2018)



**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**WITH**  
**LEARNING OUTCOMES BASED CURRICULAR FRAMEWORK (LOCF)**  
**FOR**  
**B.SC. ELECTRONIC SCIENCE**  
**UNDERGRADUATE PROGRAMME**  
**(EFFECTIVE FROM ACADEMIC YEAR 2017-2018)**

*Department of Electronic Science*

*Faculty of Electronics*

*Government College for Women*

*Parade Ground Jammu- 180001*

## **Introduction**

Govt. College for Women, Parade Ground Jammu, an 'Autonomous College' has introduced the choice based credit system (CBCS) from the academic year 2016-17. But as per the UGC and the feedback from the stakeholders, the syllabus needs some modifications and additions to meet the requirements legally and technically.

## **Aims and Objectives**

A curriculum course content and assessment of scholastic achievement play complimentary role in shaping the education. The committee is of the view that members should report and encourage the broad instructional goals such as giving knowledge of the discipline of Electronics, theory and techniques, concepts and general principles. They should also support the ability to ask physical questions and to obtain the answers by the use of quantitative and qualitative reasoning and by the experimental investigations. The important student friendly attributes including designing, creativity, curiosity and deep understanding levels of Electronics to other disciplines and to social issues should also be given encouragement.

With these things in mind, we aim to provide a firm foundation in every aspect of Electronics and to explain the broad spectrum of modern trends in Electronics.

This Programme also aims to develop the following abilities:-

1. Read, understand and interpret physical information- verbal, mathematical and graphical.
2. Imparting skills required to gather information from resources and to use them.
3. Offer courses as per the choice of the students.

4. Perform the experimental analysis and interpret and compose the results of the observation.
5. Use of ICT tools at the undergraduate level.
6. Providing the best facilities in the department to attract outstanding students from all background.

### **Objectives of the Programme**

Following are the main objectives of the Programme:-

1. To provide the deep knowledge of scientific and technological aspects of Electronics.
2. Updating students with recent and technological developments.
3. Train the students by introducing skill based courses in Electronics.
4. Enrich students through programmes such as seminars, workshops, quizzes etc.
5. Train students to a level to compete for seats for the advanced degrees such as masters and other related disciplines.

### **Duration of the Program**

The duration of the undergraduate program is six semesters. There shall be two semesters in the academic year. The odd semester (sem-I, III and V) commences from 15th of July, every year and the even semester (sem-II, IV and VI) commences in the month of January, every year. Between the semesters, there is a break of one and a half month called 'summer vacation' which commences from 1st of June to the 15th of July, and ten days winter vacations which commences from 1st of January to 10th of January, every academic year. The students may be

permitted to complete the program on valid reasons, within a period of six continuous semesters from the date of commencement of first semester of the program.

### **Evaluation of various components in the curriculum and marks distribution for internal and external evaluation**

The final end semester examination shall be conducted by the college at the end of each semester.

Internal evaluation is to be done by the internal assessment test taken one month before the start of final end semester examination and the evaluation of attendance.

For all the papers, internal and practical examination is to be taken before and after the start of final end semester examination. Thus the overall marks distribution for external and internal theory examination as well as the practical examination is shown below.

1. For all theory papers

a. Marks of external examination= 80

Marks Distribution of external examination is given below:-

External examination is comprising of three sections:

Section A, Section B and Section C

A. Section A is comprising of 10 questions, one question from each unit and each question carry 02 marks. All the questions are compulsory.

B. Section B is comprising of 05 questions, two questions from each unit and each question carry 06 marks with internal choice from each unit.

C. Section C is comprising of 05 questions, one question from each unit and each question carry 15 marks. Students are required to attempt any of the two.

Note: 15% of the total marks are reserved for numerical problems.

b. Marks of internal evaluation= 20

All the two components of internal assessments are mandatory

Component of internal evaluation of theory	Marks
Attendance	05
Internal Assessment Test/ Assignment Test	15
	20

2. For all the Practical Papers

a. Marks of external examination= 25

b. Marks of internal evaluation= 25

Internal Practical Examination

All the three components of internal assessments are mandatory

Components of internal evaluation of Practical	Marks
Attendance	05
Viva	08
Performance / Involvement in lab	12
Total	25

The practical file related to the number of experiments performed must be duly signed by the teacher in charge and must be authenticated by the HOD Electronics. For appearing in the external practical examination, certified record should also be produced.

### External Practical Examination

For all the practical papers, there will be an external evaluation. The external examiner will be appointed by the Principal of the college in consultation with the HOD in charge. There will be an internal examiner who will be appointed by the head of the department. The examination will be of three hour duration and the various components for the evaluation of external examination are given below.

Components of external evaluation of Practical examination	Marks
Attendance	06
Practical Record File	06
Viva	05
Experimentation/ Data collection	08
	25

### 3. Assignments

Assignments are to be done for all the semesters. At least one assignment should be done in each semester for all the theory courses.

### 4. Internal Assessment

One internal test paper is to be taken in each semester for each theory course. The evaluation of all the components are to be published and shall be acknowledged by the candidates time to time.

All the documents of internal assessments are to be kept in the custody of the convener of the internal assessment examination and shall be made available to students for verification as

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and when required. The responsibility of evaluating the internal assessment is vested on the teacher in charge.

**5. Attendance Evaluation**

For all the courses- Theory and Practical

Percentage of Attendance	Marks
>90%	05
85%-90%	04
80%-85%	03
75%-80%	02
<75%	Ineligible