

*Progressive Education Society's*  
**Modern College of Arts, Science and  
Commerce,  
Shivajinagar, Pune 5**

## **Framework of Syllabus**

**For B.Sc. Electronic Science**

**(2019-20 Course)**

**(with effect from 2019-20 )**

**CIA:** Continuous Internal Evaluation

**Semester 1 (First Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-1	19ScEleU101	Basics of Analog Electronics	03	02	40	60	100
CCT-2	19ScEleU102	Principles of Digital Electronics	03	02	40	60	100
CCP-1	19ScEleU103	Basic Analog and Digital Electronics Lab	03	02	40	60	100
<b>Total Credits</b>			-	<b>06</b>			

**Semester 2 (First Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-9	19ScEleU201	Electronic Devices and Circuits	03	02	40	60	100
CCT-10	19ScEleU202	Digital Electronic Circuits	03	02	40	60	100
CCP-8	19ScEleU203	Analog and digital electronic circuits lab	03	02	40	60	100
<b>Total Credits</b>			-	<b>06</b>			

**Semester 3 (Second Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-19	19ScEleU301	Analog circuit design	04	2.5	40	60	100
CCT-20	19ScEleU302	Digital circuit design	04	2.5	40	60	100
CCP-9	19ScEleU303	Analog and digital circuit design lab	04	02	40	60	100
<b>Total Credits</b>			-	<b>07</b>			

**Semester 4 (Second Year)**

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
CCT-25	19ScEleU401	Analog Circuit Design using Op-amp	04	2.5	40	60	100
CCT-26	19ScEleU402	Advanced digital circuit design	04	2.5	40	60	100
CCP-13	19ScEleU403	Op-amp and digital circuits design lab	04	02	40	60	100
<b>Total Credits</b>			-	<b>07</b>			

### Semester 5 (Third Year)

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
DSET-1	19ScEleU501	Linear Integrated Circuits	04	2.5	40	60	100
DSET-2	19ScEleU502	8051 microcontroller and Embedded systems	04	2.5	40	60	100
DSET-3	19ScEleU503	Power Electronics –I	04	2.5	40	60	100
DSET-4	19ScEleU504	Basics of Semiconductor materials in Electronics	04	2.5	40	60	100
DSET-5	19ScEleU505	Electronic Communication	04	2.5	40	60	100
DSET-6	19ScEleU506	“C” Programming	04	2.5	40	60	100
DSEP-1	19ScEleU507	Linear Electronics and Electronic communication Lab.	04	2	40	60	100
DSEP-2	19ScEleU508	Embedded system and C programming Lab.	04	2	40	60	100
SECP-3	19ScEleU509	Project	04	2	40	60	100
<b>Total Credits</b>			-	<b>21</b>			

### Semester 6 (Third Year)

Course Type	Course Code	Course / Paper Title	Hours / Week	Credit	CIA	End Sem Exam	Total
DSET-7	19ScEleU601	Instrumentation	04	2.5	40	60	100
DSET-8	19ScEleU602	Embedded systems- applications	04	2.5	40	60	100
DSET-9	19ScEleU603	Power Electronics –II	04	2.5	40	60	100
DSET-10	19ScEleU604	Fundamentals of Nanotechnology	04	2.5	40	60	100
DSET-11	19ScEleU605	Advanced Electronic Communication	04	2.5	40	60	100
DSET-12	19ScEleU606	Modeling and Simulation using Matlab	04	2.5	40	60	100
DESP-4	19ScEleU607	Instrumentation and Power Electronics Lab.	04	02	40	60	100
DESP-5	19ScEleU608	Embedded system and Matlab application Lab.	04	02	40	60	100
SECP-6	19ScEleU609	Project / Internship	04	02	40	60	100
<b>Total Credits</b>			-	<b>21</b>			