



# NEHRU ARTS AND SCIENCE COLLEGE

(Autonomous)

Reaccredited by NAAC with 'A' Grade, Certified by ISO 9001:2008 & 14001:2004

Recognized by UGC & Affiliated to Bharathiar University

Nehru Gardens, Coimbatore-641 105

## Scheme of Examination (II Semester Language)

(Applicable to the students admitted during the year 2018-2019)

### B. Sc., Electronics and Communication Systems

Semester	Part	CourseCode	Name of the Course	Instruction hours / week	Duration of Examination	Examination Marks			Credits
						CIA	ESE	Total	
I	I	18U1TAM101/ 18U1HIN101 / 18U1MAL101/ 18U1FRN101	Language I	5	3	25	75	100	4
	II	18U2ENG101	English I	5	3	25	75	100	4
	III	18U3ECC101	Core Paper I Basic Electronics	4	3	25	75	100	4
		18U3ECC102	Core Paper II Material Science	4	3	25	75	100	4
		18U3MEA101	Allied Paper Mathematics –I	4	3	25	75	100	4
		18U3ECP103	Core Paper III Basic Electronics Practical	5	3	30	45	75	3
	IV	18U4ENV101	Ability enhancement Compulsory course : Environmental Studies	2	2	-	50	50	2
IV	18U4HVY101	Human Values and Yoga Practice I	1	-	-	-	-	-	
				<b>30</b>				<b>625</b>	<b>25</b>
II	I	18U1TAM202/ 18U1HIN202/ 18U1MAL202/ 18U1FRN202	Language II	5	3	25	75	100	4
	II	18U2ENG202	English II	5	3	25	75	100	4
	III	18U3ECC204	Core Paper IV Semiconductor Devices	4	3	25	75	100	4
		18U3ECC205	Core Paper V Principle of Communication Systems	4	3	25	75	100	4

		18U3MEA202	Allied Paper II Mathematics – II	4	3	25	75	100	4
		18U3ECP206	Core Paper VI Semiconductor devices Practical	5	3	30	45	75	3
	IV	18U4HRC202	Ability enhancement Compulsory course : Human Rights and Constitution of India	2	2	-	50	50	2
	IV	18U4HVY202	Human Values and Yoga Practice I	1	2	25	25	50	2
				<b>30</b>				<b>675</b>	<b>27</b>
III		18U3ECC307	Core Paper VII Analog Electronic Circuits	6	3	25	75	100	4
		18U3ECC308	Core Paper VIII Television Engineering	6	3	25	75	100	4
		18U3CMA303	Allied Paper III Programming in C	5	3	25	75	100	4
		18U3ECP309	Core Paper IX Electronic Circuits Practical	5	3	30	45	75	3
	IV	18U4ECS301	Skill Based Paper Computer Architecture and Organization	3	2	20	55	75	3
	IV	18U4NM3BT1 / 18U4NM3AT1 / 18U4NM3YHE / 18U4NM3GTS / 18U4NM3WRT	# @Basic Tamil / ##Advanced Tamil / * NME: Yoga for Human Excellence / Gandhian Thoughts / Women's Rights	2	3	50		50	2
	IV	Extra Departmental		2	-	-	50	50	2
	IV	18U4HVY303	Human Values and Yoga Practice II	1	-	-	-	-	-
	IV	18U4ECVALC	**Skill Enhancement Add on Course- Institute Industry Linkage	-	-	-	-	-	-
				<b>30</b>				<b>550</b>	<b>22</b>
IV		18U3ECC410	Core Paper X Digital Principles and Applications	5	3	25	75	100	4

		18U3ECC411	Core Paper XI Satellite and Network Communications	5	3	25	75	100	4
		18U3CMA404	Allied Paper IV Java Programming	5	3	25	75	100	4
		18U3CMR405	Allied Paper V C Programming Practical	4	3	30	45	75	3
		18U3ECP412	Core Paper XII Digital Electronics Practical	5	3	30	45	75	3
IV		18U4ECS402	Skill Based Paper II Computer Design	3	3	20	55	75	3
IV		18U4NM4BT2 / 18U4NM4AT2 / 18U4NM4GEN	# @Basic Tamil / ##Advanced Tamil / General Awareness	2	3	50		50	2
IV		18U4HVY404	Human Values and Yoga Practice II	1	2	25	25	50	2
IV		18U4ECVALC	** Skill Enhancement Add on Course- Institute Industry Linkage	-	-	-	-	-	Grade
				<b>30</b>				<b>625</b>	<b>25</b>
V		18U3ECC513	Core Paper XIII 8085 Microprocessor and Applications	5	3	25	75	100	4
		18U3ECC514	Core Paper XIV Industrial and Power Electronics	6	3	25	75	100	4
		18U3ECE501/ 18U3ECE502/ 18U3ECE503	Discipline Specific Elective Paper I	5	3	25	75	100	4
		18U3ECP515	Core Paper XV 8085 Microprocessor Practical	5	3	30	45	75	3
		18U3ECP516	Core Paper XVI Electronic Communication Practical	5	3	30	45	75	3
	IV		18U4ECS503	Skill Based Paper III PC Hardware and Troubleshooting	4	3	20	55	75
				<b>30</b>				<b>525</b>	<b>21</b>

VI		18U3ECC617	Core Paper XVII 8051 Microcontroller	6	3	25	75	100	4
		18U3ECE604/ 18U3ECE605/ 18U3ECE606	Discipline Specific Elective Paper II	5	3	25	75	100	4
		18U3ECE607/ 18U3ECE608/ 18U3ECE609	Discipline Specific Elective Paper III	5	3	25	75	100	4
		18U3ECP618	Core Paper XVIII 8051 Microcontroller Practical	5	3	30	45	75	3
		18U3ECV601	Project Work & Viva Voce	5	3	-	100	100	4
	IV	18U4ECZ604	Skill Based Paper IV Visual and Java Programming Practical	4	3	30	45	75	3
	V	18U5EC6EXT	Extension Activity	-	-	50	-	50	2
				<b>30</b>				<b>600</b>	<b>24</b>
<b>Total</b>								<b>3600</b>	<b>144</b>
<b>Additional Credit (Optional)</b>			Semester II-V						<b>8<sup>\$</sup></b>

# **Basic Tamil** -Students who have not studied Tamil upto 12th standard.

##**Advance Tamil** – Students who have studied Tamil language upto 12th standard and chose another languages under part I of the programme but would like to advance theirTamil language skills.

\* **NME** – Student shall choose any one course out of three courses.

@ No End Semester Examinations. Only Continuous Internal Assessment (CIA)

\$- Not included in Total marks and CGPA Calculation

\*\*Examinations and evaluations for value added course shall be conducted by the industry and the marks shall be submitted to the Controller of Examination section for the award of grade.

**Discipline Specific Elective papers (Choose any one of the paper)**

Elective Papers	Course Code	Group	Name of the Course
Elective Paper – I	18U3ECE501	A	Biomedical Instrumentation
	18U3ECE502	B	Computer Communication and Networks
	18U3ECE503	C	Mobile Computing
Elective Paper – II	18U3ECE604	A	PIC Microcontroller
	18U3ECE605	B	Cryptography
	18U3ECE606	C	Nano Technology
Elective Paper - III	18U3ECE607	A	Embedded Systems
	18U3ECE608	B	Digital Communication
	18U3ECE609	C	Advanced Communication and Fiber Optics System

**Extra Departmental Course offered by Electronics Department to other Department Students**

S.No.	Semester	Course Code	Course Title
1	III	18U4EC3ED1	Basic Electronics
2		18U4EC3ED2	Electronic Instrumentation

**Additional Credit Course**

Earning Additional credit course is not mandatory for Course Completion

Additional credits: 8

S. No.	Course	Credit	Total credits
1	Completion of Certificate Course	1	1
2	Hindi/ other Foreign languages	1	1
3	Self Study Papers	1	2
4	MOOC Courses/Spoken Tutorial prescribed by the Departments	1	3
5	Representation - Sports/Social Activities/ Co curricular/Extracurricular Activities at University/ District/ State/ National/ International levels	1	1
<b>Total</b>			<b>8</b>

**Rules:** The Students can earn additional credits only if they complete the above during the course period (II to V Semester) and based on the following criteria. Proof of Completion must be submitted to the Office of Controller of Examinations before the commencement of the VI Semester. (Earning Additional credit course is not mandatory for Course Completion)

1. Students can complete Certification Courses for a minimum of 30hrs (II to V Semester) from reputed centers and the same certificate shall be produced to earn a credit. They shall be guided by the Department if needed.
2. Students can opt Hindi/ any Foreign Language approved by Certified Institutions to earn one credit. The certificate of Hindi must be obtained from DakshinBharatHindiPrachar Sabha and He/ She has to enroll and complete during their course period (II to V Semester)
3. Students can earn one credit, if they complete One Self-study Paper prescribed by the Department. The Departments shall offer two Self Study Papers.

**Self study Paper offered by Department of Electronics**

S. No.	Semester	Course code	Course Title
1	II - V	18UECSS01	Virtual Instrumentation
2		18UECSS02	VLSI Design using VHDL

4. Students can earn one Credit, if they complete any one Massive Open Online Course (MOOC)/ Spoken Tutorial prescribed by the Department. Students shall earn a maximum of 3 Additional Credits by completing 3 online courses.

**List of Online Courses prescribed by Department of Electronics**

1. LibreOffice - Spoken Tutorial
2. Bash Linux - Spoken Tutorial
3. LaTeX - Spoken Tutorial
4. KiCad - Spoken Tutorial
5. Scilab - Spoken Tutorial

**Note:** Other than the above mentioned courses, any course from recognized websites with the consent of the Head of the Department will also be accepted.

5. Award Winners in Sports/Social Activities/ Co curricular/ Extra Curricular Activities at University/ District/ State/ National/ International levels can earn One Extra Credit by producing the Certificate.

**Chairman  
Board of Studies in Electronics  
Nehru Arts and Science College  
Coimbatore**