



NEHRU ARTS AND SCIENCE COLLEGE

(An Autonomous Institution affiliated to Bharathiar University)
 (Reaccredited with "A+" Grade by NAAC, ISO 9001:2015 & 14001:2004 Certified
 Recognized by UGC with 2(f) & 12(B), Under Star College Scheme by DBT, Govt. of India)
 Nehru Gardens, Thirumalayampalayam, Coimbatore - 641 105, Tamil Nadu.



Scheme of Examination

B. Sc. Internet of Things

Programme Code : UET

(Applicable to the students admitted during the year 2024-2025 onwards)

Semester	Part	Course Code	Name of the Course	Instruction hours/week	Duration of Examination	Examination Marks			Credits	
						CIA	ESE	Total		
I	I	23U1TAM101/ 24U1HIN101 / 24U1MAL101/ 24U1FRN101	Elanthamizh Rachnathmak Hindi Kadha, Samskaaram, Vivarthanam Le Français Fondamental - I	4	3	20	55	75	3	
	II	24U2ENG101	Professional English - I	4	3	20	55	75	3	
	III		24U3ETC101	Core Paper I : Introduction to Internet of Things	5	3	25	75	100	4
			23U3ETC102	Core Paper II : Digital Electronics and Computer Architecture	5	3	25	75	100	4
			23U3ETP103	Core Paper III : Digital and Computer Hardware Practical	4	3	40	60	100	4
			23U3MEA101	Allied Paper I : Applied Mathematics - I	5	3	25	75	100	4
	IV		21U4ENV101	*@ Ability Enhancement Compulsory Course Environmental Studies	2	3	50	-	50	2
			22U4HVY201	@ Value Education : Human Values and Yoga Practice	1	-	-	-	-	-
				30				600	24	
II	I	23U1TAM202/ 24U1HIN202/ 23U1MAL202/ 24U1FRN202	Pynthamizh Sanchar Hindi Novalum Bhashaapadanavum Le Français Fondamental - II	4	3	20	55	75	3	
	II	24U2ENG202	Professional English - II	4	3	20	55	75	3	
	III	24U3ETC204	Core Paper IV : Internet of Things Architecture and Design Principles	5	3	25	75	100	4	

		23U3ETC205	Core Paper V : Electronic Devices and Circuits	5	3	25	75	100	4	
		23U3ETP206	Core Paper VI : Electronic Devices and Circuits Practical	4	3	40	60	100	4	
		23U3MEA202	Allied Paper II : Applied Mathematics - II	5	3	25	75	100	4	
	IV	21U4HRC202	*@ Ability Enhancement Compulsory Course Human Rights and Constitution of India	2	3	50	-	50	2	
		22U4HVY201	@ Value Education : Human Values and Yoga Practice	1	2	50	-	50	2	
		24U4SEC201	Skill Enhancement Course 1 : Career Foundation Skills	2	2	-	-	25	1	
				32				675	27	
III	I	23U1TAM303/ 24U1HIN303 / 24U1MAL303/ 24U1FRN303	Arunthamizh Sahityak Hindi Kavithayum Smaranayum Le Français General - III	4	3	20	55	75	3	
		II	24U2ENG303	Communicative English - I	4	3	20	55	75	3
	III		23U3ETC307	Core Paper VII : Data Communications and Computer Networks	4	3	20	55	75	3
			23U3ETC308	Core Paper VIII : Microprocessor and Microcontroller	4	3	20	55	75	3
			23U3ETP309	Core Paper IX : Microprocessor and Microcontroller Practical	4	3	30	45	75	3
			23U3ETA303	Allied Paper III : C Programming using Data Structures	3	3	20	55	75	3
	IV		23U4ETZ301	Skill Enhancement Course 2 : C and Data Structures Practical	3	3	30	45	75	3
			22U4NM3BT1 / 22U4NM3AT1 / 22U4NM3CAF / 22U4NM3GST / 22U4NM3WRT	# @Basic Tamil - I / ##Advanced Tamil- I / * NME: Consumer Affairs / Gender Sensitization / Women's Rights	2	2	50		50	2
			SBOEC	Skill Enhancement Elective Course 3 : Extra Departmental Course	2	3	-	50	50	2
			23U4ETVALC	Skill Enhancement Add on Course 4 : Institute Industry Linkage	4	-	-	-	-	-
			23U4SEC302	Skill Enhancement Course 5 : Employment Enhancement Training	2	2	-	-	25	1
					32				650	26

IV	I	23U1TAM404/ 23U1HIN404 / 24U1MAL404/ 23U1FRN404/	Muthamizh Prayogik Hindi Drisyakalaa Saahithyam Le Français General - IV	4	3	20	55	75	3	
	II	23U2ENG404	Communicative English - II	4	3	20	55	75	3	
	III	23U3ETC410	Core Paper X : Wireless Sensor Networks with Internet of Things Gateway and Protocols	4	3	20	55	75	3	
		23U3ETC411	Core Paper XI : Sensors and Devices for Internet of Things	4	3	20	55	75	3	
		23U3ETP412	Core Paper XII : Sensors and Devices Practical	4	3	30	45	75	3	
		23U3ETA404	Allied Paper IV : Python Programming	3	3	20	55	75	3	
	IV	23U4ETZ402	Skill Enhancement Course 6: Python Programming Practical	3	3	30	45	75	3	
		22U4NM4BT2 / 22U4NM4AT2 / 22U4NM4GEN	# @Basic Tamil- II / ##Advanced Tamil- II / General Awareness	2	2	50		50	2	
		VBOEC	Value Based Open Elective Courses – Intra School Course	2	3	-	50	50	2	
		23U4ETVALC	Skill Enhancement Add on Course 4 : Institute Industry Linkage	4	-	-	-	50	2	
				34				675	27	
	V	III	23U3ETC513	Core Paper XIII : Industrial Internet of Things	6	3	25	75	100	4
			23U3ETC514	Core Paper XIV : Embedded System Design with Arduino	5	3	25	75	100	4
			24U3ETP515	Core Paper XV : Arduino Programming Practical	5	3	30	45	75	3
24U3ETC516			Core Paper XVI : Android Programming	5	3	20	55	75	3	
23U3ETE501/ 23U3ETE502/ 23U3ETE503			Discipline Specific Elective – I	5	3	25	75	100	4	
24U3ETV518			Internship	-	-	50	-	50	2	
IV		23U4ETZ503	Skill Enhancement Course 7 : Android Programming Practical	4	3	30	45	75	3	
		24U4SEC503	Skill Enhancement Course 8 : Campus to Corporate	2	2	-	-	25	1	
		24U4SEC504	Skill Enhancement Course 9 : Industrial Exploration / Corporate Visit	2	2	-	-	25	1	
			34				625	25		

VI	III	23U3ETC617	Core Paper XVII : Implementing Internet of Things with Raspberry Pi	6	3	25	75	100	4				
		23U3ETV601	Project and Viva Voce	6	3	40	60	100	4				
		23U3ETE604/ 23U3ETE605/ 23U3ETE606	Discipline Specific Elective – II	6	3	25	75	100	4				
		23U3ETE607/ 23U3ETE608/ 23U3ETE609	Discipline Specific Elective – III	6	3	25	75	100	4				
	IV	23U4ETZ604	Skill Enhancement Course 10: Raspberry Pi Programming Practical	6	3	30	45	75	3				
	V	23U5EXT601	Extension Activities	-	-	50	-	50	2				
								30				525	21
Total											3750	150	
Additional Credit (Optional)		Semester II - VI								10\$			

- # **Basic Tamil** - Students who have not studied Tamil up to 12th standard.
- ## **Advanced Tamil** - Students who have studied Tamil language up to 12th standard and chosen other languages under part I of the UG programme but would like to advance their Tamil 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.
- ** Examination and Evaluation for value added course shall be conducted by the Industry and the marks shall be submitted to the Controller of Examination for the award of the degree.

List of Discipline Specific Elective Papers (Choose any one of the paper):

Elective Papers	Course Code	Group	Name of the Course
Discipline Specific Elective – I	23U3ETE501	A	Cloud Storage and Computing
	23U3ETE502	B	Industrial and Power Electronics
	23U3ETE503	C	Artificial Intelligence
Discipline Specific Elective – II	23U3ETE604	A	Machine Learning Techniques
	23U3ETE605	B	Robotics and Automation
	23U3ETE606	C	Cyber Security
Discipline Specific Elective – III	23U3ETE607	A	Software Engineering and Testing
	23U3ETE608	B	Automotive Electronics
	23U3ETE609	C	Natural Language Processing

Extra Departmental Course offered by the Department to other Department Students

S.No.	Semester	Course Code	Course Title
1	III	24U4ET3ED1	Practical in PC Hardware Assembling and Networking
2		24U4AM3ED1	Practical in AI Tools and Techniques

- Students need to opt a Course other than the Course offered by their department.

Intra School Course offered by the Department to other Department Students (Within the School)

S. No	Course Code	Name of the Course
1	22U4VBOE01	Design Ecosystem
2	22U4VBOE02	Design Thinking
3	22U4VBOE03	Disaster Management
4	22U4VBOE04	Environmental Pollution and Waste Management
5	22U4VBOE05	History of Ancient India
6	22U4VBOE06	Indian Knowledge System
7	22U4VBOE07	Principles of IPR
8	22U4VBOE08	Science, Society and Culture
9	22U4VBOE09	Community Engagement
10	22U4VBOE10	Emotional Intelligence
11	22U4VBOE11	Fundamentals of Tourism
12	22U4VBOE12	Health Education
13	22U4VBOE13	Media and Politics
14	22U4VBOE14	Positive Psychology and Work Life
15	22U4VBOE15	Professional Ethics
16	22U4VBOE16	The Science of Happiness
17	NCC	

- Students shall opt any course within their Schools.
- NCC – Students who qualify NCC B Certificate Examination need not appear for these open Electives. The Credits shall be transferred.

Self Study Paper offered by Department of Internet of Things

S.No.	Semester	Course code	Course Title
1	Semester II to V	23UETSS01	Virtual Instrumentation
2		23UETSS02	Libre Office

BoS - Chairman

PRINCIPAL