



HAJEE KARUTHA ROWTHER HOWDIA COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University, Madurai.)

Uthamapalayam, Theni District. Pin Code: 625 533.

DEPARTMENT OF INFORMATION TECHNOLOGY

PART – IV PG – NME COMPUTER SCIENCE

SYLLABUS

Choice Based Credit System – CBCS

(As per TANSCHÉ/MKU Guidelines)

(Academic Year 2020-2021 onwards)

Details of Course Category, Code, Credits & Title

Course Category	Course Code	Course Title	Hrs	CIAE	TEE	Max. Marks	Credits
Semester - III							
Part - IV							
NME	20PCSN31	Information and Communication Technology	3	25	75	100	3

Course Code	Course Title	Category	Total Hours	Credits
20PCSN31	Information and Communication Technology	NME	45	3

Nature of Course	
Knowledge Oriented	✓
Skill Oriented	
Employability Oriented	
Entrepreneurship Oriented	

Course Relevance	
Local	
Regional	
National	
Global	✓

Preamble

To enable the students to provide basics Knowledge of computers, types and its components, understand the basics of networks and ICT applications, concepts of system life cycle and web development basics.

Syllabus

- UNIT I** 8 Hours
Types and components of a computer system: Hardware and software – Main components of a computer system – Operating system – Types of a computer – Impact of Emerging Technologies ,Input and Output devices , Storage devices and Media.
- UNIT II** 10 Hours
Network and the effects of using them: Networks - Network issues and communication, The effects of Using ICT: The effects of ICT on employment , The effects of ICT on working patterns – Microprocessor controlled devices in the home – Potential health problems related to the prolonged use of ICT equipment.
- UNIT III** 7 Hours
ICT applications: Communication applications – Data handling – Measurement applications – Microprocessors and control - Booking systems – Banking - Expert systems – Computers in medicine – computers in libraries – Recognition systems – Monitoring and tracking systems – Satellite system.
- UNIT IV** 10 Hours
Systems life cycle: Analysis - Design – Development and testing – Implementation – Documentation - Evaluation, Safety and security: Physical security – E-safety – security of data – Additional security of data online, Communication: Communication with other ICT users using Email – Effective use of the internet.

UNIT V

10 Hours

Website authoring: Web development layers – Create a web page – Use style sheets – Test and publish a website.

Text Books

Graham brown, Brain sergeant, David Watson Cambridge *IGCSE "ICT"* second edition.

UNIT I : chapters 1, 2, 3

UNIT II : chapter 4, 5

UNIT III : chapter 6

UNIT IV : chapter 7, 8, 10

UNIT V : chapter 21.

Reference Books

Alexis Leon and Mathews Leon, *Fundamentals of Information Technology*, Vikas Publishing House Pvt Ltd, 2009

A. Kumar, *Internet and IT*, Anmol Publications Pvt Ltd, First Edition, 2002.

Pedagogy

Chalk & Talk, E-Resources, Group Discussion

Teaching aids

Black Board, LCD Projector

Course Contents and Lecture Schedule

Module No.	Topic	No. of Lectures	Content Delivery Methods
UNIT I			
1.1	Types and components	1	PPT
1.2	Hardware and software	1	PPT
1.2	Main components of a computer system	1	PPT
1.4	Operating system	1	PPT
1.5	Impact of Emerging Technologies	1	PPT
1.6	Input devices and Methods	1	PPT
1.7	Output devices: Monitors and Printers	1	PPT
1.8	Storage devices and Media.	1	PPT
UNIT II			
2.1	Introduction to Networks	1	Chalk & Talk
2.2	Internetworking devices	2	Chalk & Talk
2.3	Network issues and communication	2	PPT
2.4	The effects of ICT on employment	1	PPT

2.5	The effects of ICT on working patterns	2	PPT
2.6	Microprocessor controlled devices	1	Chalk & Talk
2.7	Potential health problems : ICT equipment	1	Chalk & Talk
UNIT III			
3.1	Applications of ICT overview	1	PPT
3.2	Communication, measurement applications	1	Chalk & Talk
3.3	Microprocessors & control, Booking systems	1	PPT
3.4	Computers in Banking and Expert systems	1	PPT
3.5	Computers in medicine and Business	1	Chalk & Talk
3.6	Recognition systems,	1	PPT
3.7	Monitoring and tracking, Satellite system	1	PPT
UNIT IV			
4.1	SDLC and Internet – Introduction	1	Chalk & Talk
4.2	Systems life cycle: Analysis Phase	1	PPT
4.3	Systems life cycle: Design Phase	1	PPT
4.4	Systems life cycle: Development and Testing	1	PPT
4.5	Implementation, Documentation, Evaluation	1	PPT
4.6	Safety and security: Physical security	1	PPT
4.7	E-safety – security of data	1	Chalk & Talk
4.8	Additional security of data online	1	PPT
4.9	Communication with other ICT	1	PPT
4.10	Email, Effective use of the internet	1	PPT
UNIT V			
5.1	Web Development introduction	1	PPT
5.2	Website authoring:	1	PPT
5.3	Web development layers	1	PPT
5.4	Create a web page: HTML program and tags	3	PPT
5.5	CSS : Use style sheets – program standards	2	PPT
5.6	Test and publish a website.	2	PPT
	Total	45	

Course Designer

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