BACHELOR OF ENGINEERING - VIDEO LECTURES

Compiled by

Government Engineering Colleges

Affiliated to Anna University, Chennai

Bodinayakkanur - Theni, Srirangam - Trichy, Dharmapuri, Tirunelveli, Sengipatti - Tanjore, Vellore

Under the guidance of

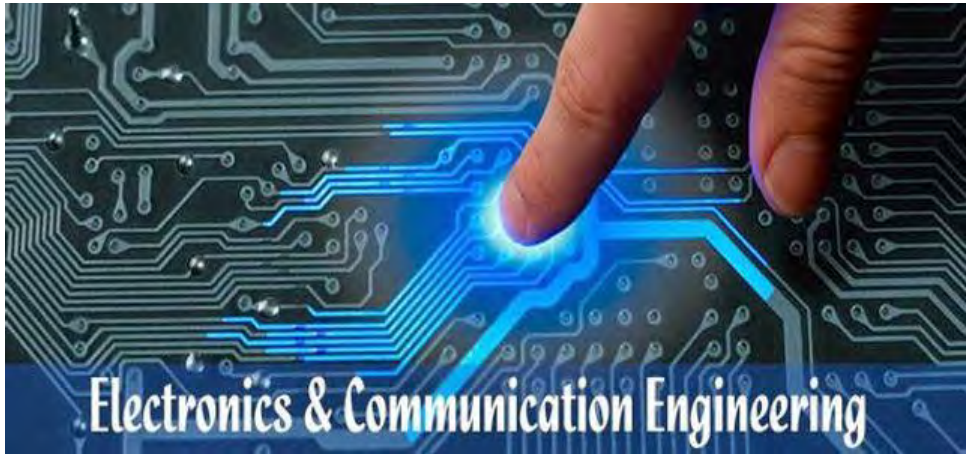
Shri. K. VIVEKANANDAN, I.A.S.

Commissioner of Technical Education

DIRECTORATE OF TECHNICAL EDUCATION

GUINDY, CHENNAI - 600025

DIRECTORATE OF TECHNICAL EDUCATION
TAMIL NADU



NON – AUTONOMOUS GOVERNMENT ENGINEERING COLLEGES

AFFILIATED TO ANNA UNIVERSITY (R-2017)

B.E. ELECTRONICS AND COMMUNICATION ENGINEERING
REGULATIONS – 2017
LIST OF ECE SUBJECTS OFFERED IN THE ODD SEMESTER 2020-21

II YEAR III SEMESTER

- EC8393 Fundamentals of Data Structures In C
- EC8351 Electronic Circuits- I
- EC8352 Signals and Systems
- EC8392 Digital Electronics
- EC8391 Control System Engineering

III YEAR V SEMESTER

- EC8501 Digital Communication
- EC8553 Discrete-Time Signal Processing
- EC8552 Computer Architecture and Organization
- EC8551 Communication Networks

IV YEAR VII SEMESTER

- EC8701 Antennas and Microwave Engineering
- EC8751 Optical Communication
- EC8791 Embedded and Real Time Systems
- EC8702 Ad hoc and Wireless Sensor Networks

V SEMESTER PROFESSIONAL ELECTIVES

- EC8073 Medical Electronics
- EC8074 Robotics and Automation

V SEMESTER OPEN ELECTIVES

- OMD551 Basics of Biomedical and Instrumentation
- OTL553 Telecommunication Network Management

VII SEMESTER PROFESSIONAL ELECTIVES

- EC8006 Mixed Signal IC Design
- CS8082 Machine Learning Techniques
- CS8086 Soft Computing

VII SEMESTER OPEN ELECTIVES

- OIC751 Transducer Engineering
- OCS751 Data Structures and Algorithms

COURSES OFFERED TO OTHER DEPARTMENT

- EC8395 Communication Engineering (III Semester CSE Dept)
- EC8681 Microprocessor and Microcontroller (V Semester CSE Dept)

TABLE OF CONTENTS

II YEAR – III SEMESTER

PROFESSIONAL CORE COURSES

1. EC8393 FUNDAMENTALS OF DATA STRUCTURES IN C - GCE SRIRANGAM

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8393 Fundamentals of Data Structures In C	GCE Srirangam	Unit-I C Programming Basics	Structure of C program, Compilation and linking process, Constants, Keywords and identifiers.	Dr. C. Santhi, Professor & Head, Dept. of ECE, cs2002cbe@yahoo.co.in , 9952432677	https://youtu.be/US4uoWl1qpE	
			Datatypes and variables		https://youtu.be/I3SBl8ll8vA	
			Expressions using operators in C – Part I	Dr. M. Rajavelu, Associate Professor, Dept. of ECE, rajavelu.m@gmail.com , 9842565042	https://youtu.be/emm99vnK9I0	
			Expressions using operators in C – Part II		https://youtu.be/1CmBh8UCfuI	
			Operators Precedence and Associativity & Managing Input and Output operations in C		https://youtu.be/xhCS94P1vTc	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Decision Making and Branching – Looping statements in C		https://youtu.be/gHHn7fynM1M	
			Arrays -Initialization- Declaration -One dimensional arrays	Mr. N. Sri Ramalinga Ganesa Perumal, Assistant Professor (Adhoc), Dept .of ECE, srgperumal@gmail.com , 9894581169	https://youtu.be/SOyWdtMzq-M	
			Strings -String operations- One dimensional arrays - String arrays		https://youtu.be/TvX4czkzyF0	
			Multidimensional arrays - Two dimensional arrays - String arrays		https://youtu.be/IxqMyDhANlk	
			Simple Programs - Sorting - searching - Matrix operations	Mr. P.Vijay Anand, AP/ ECE, vijayanand.me.cit@gmail.com , 9003028080	https://youtu.be/dgI6XiOM5b4	
EC8393 Fundamentals of Data Structures In C	GCE Srirangam	Unit-II Functions, Pointers, Structures and Unions	Pointers – Definition- Initialization – Pointers arithmetic	Dr. M. Rajavelu, Associate Professor, Dept. of ECE, rajavelu.m@gmail.com 9842565042	https://youtu.be/77gc4l09_JQ	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Structures and Unions - Definition - Structure within a Structure - Union - Programs using Structures and Union in C	Dr.T. Shankar, AP/ECE, rathashankar@gmail.com , 9942925211	https://youtu.be/CtWB5ZK88Fw	
			Functions – Pass by value – Pass by reference	Mr. N. Sri Ramalinga Ganesa Perumal, Assistant Professor (Adhoc), Dept .of ECE, srgperumal@gmail.com, 9894581169	https://youtu.be/KNwaZ234osA	
			Scope and Extent - Recursion		https://youtu.be/6IZD8wqsu7o	
			Functions – Pass by value – Pass by reference	Mr. M. Dinesh Assistant Professor / ECE, dineshece3@gmail.com 9500911424	https://youtu.be/pseCju06FCI	
EC8393 Fundamentals of Data Structures In C	GCE Srirangam	Unit-III LINEAR DATA STRUCTURES	Stacks & Queues	Dr. M. Rajavelu, Associate Professor, Dept. of ECE, rajavelu.m@gmail.com, 9842565042	https://youtu.be/iuHi7UmeKeg	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Linked Lists - Linked List based implementation of Stacks and Queues	Dr.T. Shankar, AP/ECE, rathashankar@gmail.com , 9942925211	https://youtu.be/eKxgfFoSjEo	
			Arrays and its representations. Evaluation of Expressions	Mr. N. Sri Ramalinga Ganesa Perumal, Assistant Professor (Adhoc), Dept .of ECE, srgperumal@gmail.com, 9894581169	https://youtu.be/WCWBrvBmnk0	
			Linked list based polynomial addition	Mr. M. Dinesh Assistant Professor / ECE, 9500911424 dineshece3@gmail.com	https://youtu.be/qMR-0iA6LTk	
EC8393 Fundamentals of Data Structures In C	GCE Srirangam	Unit-IV Non - Linear Data Structures	Trees and Binary Trees - Binary tree representation and traversals	Dr.M. Rajavelu, Associate Professor, Dept. of ECE, rajavelu.m@gmail.com, 9842565042	https://youtu.be/rQ64rQ2iZnw	
			Binary Search Trees and Application of Trees (Part - I)	Dr.T. Shankar, AP/ECE,	https://youtu.be/_8W3au-Zsms	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Binary Search Trees and Application of Trees (Part - II)	rathashankar@gmail.com , 9942925211	https://youtu.be/XWYxF7XnYp4	
			Set representation and union - Find Operations	Mr. N. Sri Ramalinga Ganesa Perumal, Assistant Professor (Adhoc), srgperumal@gmail.com, 9894581169	https://youtu.be/3K8vFk4AfAQ	
			Graph and it's representation- graph traversals	Mr. M. Dinesh Assistant Professor / ECE, 9500911424 dineshece3@gmail.com	https://youtu.be/-OnsP0h-LNU	
EC8393 Fundamentals of Data Structures In C	GCE Srirangam	Unit-V Searching and Sorting Algorithms	Linear Search and Binary Search	Dr.M. Rajavelu, Associate Professor, Dept. of ECE, rajavelu.m@gmail.com, 9842565042	https://youtu.be/_uS4Fe6kpxs	
			Bubble Sort and Insertion Sort	Dr.T. Shankar, AP/ECE, rathashankar@gmail.com , 9942925211	https://youtu.be/gKw0HcxeHEk	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Merge Sort and Quick Sort	Mr. N. Sri Ramalinga Ganesa Perumal, Assistant Professor (Adhoc), srgperumal@gmail.com , 9894581169	https://youtu.be/NXlAqzrDjRU	
			Hash tables and overflow handling	Mr. M. Dinesh Assistant Professor / ECE, 9500911424 dineshece3@gmail.com	https://youtu.be/5QpejUYrG3Q	

2. EC8351 ELECTRONIC CIRCUITS- I - TPGIT VELLORE

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8351 Electronic Circuits- I	TPGIT Vellore	Unit-I Biasing of Discrete BJT, JFET & MOSFET	Need for biasing and DC load line and Bias point and analysis of transistor circuits	Dr. S. Sathishbabu sathish3575@gmail.com 9894235162	https://youtu.be/ndwfwWsFUrw	
			Various biasing methods of BJT, Bias Circuit design and Stability factors		https://youtu.be/ijs8HkYuBv8	
			Various biasing methods of BJT, Bias Circuit design and Stability factors		https://youtu.be/u9K7X_A7gk0	
			Bias Compensation techniques using diode, thermistor and Sensistor, thermal stability BJT Switching circuits		https://youtu.be/VUqnkVh0q64	
			JFET – DC Load Line and Bias Point – Various biasing methods of JFET – JFET Bias Circuit Design		https://youtu.be/s1NxfyXpfMs	
			MOSFET Biasing – Biasing FET Switching Circuits		https://youtu.be/F2vKJOKLvrQ	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8351 Electronic Circuits- I	TPGIT Vellore	Unit-II BJT Amplifiers	Introduction to Two port Network Theory	Prof.S.Krithiga, AP/ECE, TPGIT 9710907221 krithiga.sri@gmail.com	https://youtu.be/h1BzwFpLHWw	
			Hybrid π model		https://youtu.be/nFtuaG1OjHk	
			Small Signal Analysis of CE Amplifier Fixed Bias Amplifier		https://youtu.be/oVLq_OUD8GE	
			Small Signal Analysis of CE Amplifier -Emitter Bias & Voltage Divider Bias		https://youtu.be/X81t67euw-k	
			Small Signal Analysis of CE Amplifier –bypass Capacitor		https://youtu.be/bHYdlmbxXk8	
			Small Signal Analysis of CE Amplifier-Collector to Base Feedback Bias		https://youtu.be/hNtIU61kw-0	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Small Signal Analysis of CC and CB Amplifier		https://youtu.be/MLUGqwvixIk	
			AC Load line Analysis	Prof.S.Krithiga, AP/ECE, TPGIT 9710907221 krithiga.sri@gmail.com	https://youtu.be/rQC15VvHH7Y	
			Darlington Amplifier		https://youtu.be/6YNZ0rp-a4Y	
			Bootstrap Technique	Prof.S.Krithiga, AP/ECE, TPGIT 9710907221 krithiga.sri@gmail.com	https://youtu.be/muQ1dChvVmM	
			Multistage Amplifier		https://youtu.be/96CPzXbV2u4	
			Cascode Amplifier		https://youtu.be/E-Fynb0lR-4	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Differential Amplifier		https://youtu.be/G05auN2IFnQ	
			Small Signal Analysis of Differential Amplifier		https://youtu.be/ObAWg7-OdqY	
EC8351 Electronic Circuits- I	TPGIT Vellore	Unit-III Single Stage FET, MOSFET Amplifiers	Prerequisites-I for studying MOSFET Amplifiers	B. Senthil Murugan, AP/ECE, 9500820678 bsenthil24@gmail.com	https://youtu.be/Z9mLaRIdyCs	
			Prerequisites-II for studying MOSFET Amplifiers	B. Senthil Murugan, AP/ECE, 9500820678 bsenthil24@gmail.com	https://youtu.be/h4IcoRlETl0	
			Small signal equivalent circuit for MOSFET and FET		https://youtu.be/DEYvg0lK_ts	
			Common Source amplifier		https://youtu.be/Yq--Tg8hDFs	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Common Drain amplifier		https://youtu.be/WkTxtNB1Kro	
			Common Gate amplifier	B. Senthil Murugan, AP/ECE, TPGIT 9500820678 bsenthil24@gmail.com	https://youtu.be/Jami4oGfv7A	
			JFET amplifiers		https://youtu.be/c8jKDh99AIE	
			Differential amplifier-I		https://youtu.be/YlfLMcdQ0xo	
			Differential amplifier-II		https://youtu.be/pmO22euHmuY	
			BICMOS circuits		https://youtu.be/ko4kDODALUM	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8351 Electronic Circuits- I	TPGIT Vellore	Unit-IV Frequency Response of Amplifiers	Amplifier Frequency Response with Semi log Graph	Prof. R. Bharathiraja AP/ECE, TPGIT Ph:9791416490	https://youtu.be/wu-8p3hTYjM	
			Frequency Response of Amplifier with Circuit Capacitors		https://youtu.be/Y35UVlUbt4E	
			Effect of Bypass and Coupling Capacitor at Low frequency		https://youtu.be/wtmCwN2MMq0	
			High frequency Hybrid ∏ model	Prof.R.Bharathiraja, AP/ECE, TPGIT Ph:9791416490	https://youtu.be/J-lZh7YOit4	
			Short Circuit current Gain of CE Amplifier		https://youtu.be/wnENPQSR31g	
			α Cut off ,β Cut off, Unity Gain frequency, Gain BW product.		https://youtu.be/aJa9Pcn69hE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Miller Capacitance and Low frequency response of MOSFET		https://youtu.be/tKzb8cofQPc	
			High frequency analysis of MOSFET	Prof.R.Bharathiraja, AP/ECE, TPGIT Ph:9791416490	https://youtu.be/qNXHEnp_tOs	
			Miller effect and Miller Capacitance of MOSFET		https://youtu.be/WGx8qy24oqk	
			High frequency analysis of CE Amplifier, Bandwidth of Multistage amplifier		https://youtu.be/ZTUcWQrHSZs	
			Numerical Problems		https://youtu.be/k4U4jvxEOys	
EC8351 Electronic Circuits- I	TPGIT Vellore	Unit-V Power Supplies and Electronic Device Testing	Power Supplies and Electronics Device Testing Linear mode power supply, Rectifiers and Half wave rectifier power supply	Dr. R. Dhanalakshmi, Associate Professor, dhanavishnu02@gmail.com	https://youtu.be/ZmCrP5pUiRY	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Power Supplies and Electronics Device Testing– Full wave rectifier power supply	Mobile: 9486834936	https://youtu.be/pK-61TsF_kU	
			Power Supplies and Electronics Device Testing– Filters		https://youtu.be/eZLkrwBjQ2Y	
			Voltage regulation, linear series, shunt and switching voltage regulators		https://www.youtube.com/watch?v=5Lhjg0ynwII	
			Overvoltage protection BJT and MOSFET		https://www.youtube.com/watch?v=KtlNW_0R-BY	
			Switched Mode power supply	Dr. R. Dhanalakshmi, Associate Professor, dhanavishnu02@gmail.com 9486834936	https://www.youtube.com/watch?v=rKbTNhsSVEw	
			Power supply performance		https://www.youtube.com/watch?v=J25yCe0cmos	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Testing of power supply		https://www.youtube.com/watch?v=bDcMS6GaMt4	
			Trouble shooting and fault analysis. Design of DC regulated DC power supply		https://www.youtube.com/watch?v=1tLd-QNeeVM	

3. EC8352 SIGNALS AND SYSTEMS - GCE BODINAYAKANUR

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8352 Signals and Systems	GCE Bodinayakanur	Unit-I Classification of Signals and System	Introduction to Signals	Prof. N Sugan AP/ECE 9962399751 sugannece@gmail.com	https://www.youtube.com/watch?v=D-x-X8gTSYM	
			Standard signals Continuous and Discrete Signals		https://www.youtube.com/watch?v=c1wYims3-mU&t=22s	
EC8352 Signals and Systems	GCE Bodinayakanur	Unit-II ANALYSIS OF CONTINUOUS TIME SIGNALS	Introduction of Fourier Series	Prof. N Sugan AP/ECE 9962399751 sugannece@gmail.com	https://www.youtube.com/watch?v=qw3yLy_8Evs	
			Fourier Series		https://www.youtube.com/watch?v=7DX_Dj_Rjoo	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Introduction of Fourier Transform	Prof. N Sugan AP/ECE 9962399751 sugannece@gmail.com	https://www.youtube.com/watch?v=nD8cGXE6KOw	
			Fourier transform of impulse and complex exponential signal		https://www.youtube.com/watch?v=EmfekHh8px0	
			Fourier Transform of Basic elementary signal		https://www.youtube.com/watch?v=Eo6jin7ws9g	
			Introduction of Laplace Transform		https://www.youtube.com/watch?v=cH4PThij0z8&ab_channel=ECELEARNING	
			Laplace Transform of Basic Signals		https://www.youtube.com/watch?v=PRbthWgKDa8&ab_channel=ECELEARNING	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8352 Signals and Systems	GCE Bodinayakanur	Unit-III LINEAR TIME INVARIANT CONTINUOUS TIME SYSTEMS	Introduction of LTI system and impulse response and Transfer Function	N Sugan AP/ECE 9962399751 sugannece@gmail.com	https://www.youtube.com/watch?v=3NGhen1Bwk4&ab_channel=ECELEARNING	
			LTI system analysis with impulse input		https://www.youtube.com/watch?v=gTjT72sMqLE&ab_channel=ECELEARNING	
			LTI system analysis with unit step input and stability of the LTI system		https://www.youtube.com/watch?v=Zq8cJ3lkGgo&ab_channel=ECELEARNING	
			Block Diagram Realization (Direct Form-I)		https://www.youtube.com/watch?v=66BurkctJQU&ab_channel=ECELEARNING	
			Block Diagram Realization (Direct Form-II)		https://www.youtube.com/watch?v=OzK7G09DS8Q&ab_channel=ECELEARNING	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Block Diagram Realization (cascade and parallel form)		https://www.youtube.com/watch?v=5RSuCeC_Hcc&ab_channel=ECELEARNING	
EC8352 Signals and Systems	GCE Bodinayakanur	Unit-IV CONTINUOUS TIME SYSTEMS	DTFT Introduction	Prof. N Sugan AP/ECE 9962399751 suganneceg@gmail.com	https://www.youtube.com/watch?v=Kvi2VL0ziUA&ab_channel=ECELEARNING	
			Properties of DTFT		https://www.youtube.com/watch?v=BaVoaFKCKAs&ab_channel=ECELEARNING	
			Properties of DTFT		https://www.youtube.com/watch?v=I_moBcpcDJ8&ab_channel=ECELEARNING	
			Z transform and Properties		https://www.youtube.com/watch?v=d758BvBG-Bk&ab_channel=ECELEARNING	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Z Transform of Basic Signals and ROC	Prof. N Sugan AP/ECE 9962399751 sugannece@gmail.com	https://www.youtube.com/watch?v=eORIB7tjA_0&ab_channel=ECELEARNING	
			Inverse Z Transform		https://www.youtube.com/watch?v=_sVKk8yzErE&ab_channel=ECELEARNING	
EC8352 Signals and Systems	GCE Bodinayakanur	Unit-V	LTI System analysis using Z transform	N Sugan AP/ECE 9962399751 sugannece@gmail.com	https://www.youtube.com/watch?v=-Si-zyYdTTk&ab_channel=ECELEARNING	
			Convolution Sum using Matrix and Tabulation and Multiplication Method		https://www.youtube.com/watch?v=7fifKYnFfQo&ab_channel=ECELEARNING	
			Convolution using Graphical Method		https://www.youtube.com/watch?v=Uvi8DRvniko&ab_channel=ECELEARNING	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Convolution using Z Transform	Prof. N Sugan AP/ECE 9962399751 sugannece@gmail.com	https://www.youtube.com/watch?v=rmMIPPVIRWg&ab_channel=ECELEARNING	
			Direct form I and II Block diagram realization for LTI system		https://www.youtube.com/watch?v=2JptR15OQg0&ab_channel=ECELEARNING	
			Cascade and Parallel form Block diagram realization for LTI		https://www.youtube.com/watch?v=uyXwxzUG_lQ&ab_channel=ECELEARNING	

4. EC8392 DIGITAL ELECTRONICS - TPGIT VELLORE

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8392 Digital Electronics	TPGIT Vellore		Introduction to Digital Electronics	Prof. M. Manimegalai, AP/ECE, manimega.samy@gmail.com Phone no-7810069767	https://youtu.be/DkqAisj4H6c	
			Number Systems – Decimal, Binary, Octal, Hexadecimal		https://youtu.be/kcwFUfvR99A	
			1's and 2's complements		https://youtu.be/NnQS0CCWwcQ	
			Codes – Binary, BCD, Excess -3, Gray, Alphanumeric Codes		https://youtu.be/z8JEBr3jl_M	
			Boolean Theorems		https://youtu.be/OBTUVo0GoWs	
			Logic gates		https://youtu.be/zCrECRKYbCM	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Universal gates	Prof. M. Manimegalai, AP/ECE, manimega.samy@gmail.com Phone no-7810069767	https://youtu.be/n_xDT8AY_YA	
			Sum of Products and Product of sums, Minterms and Maxterms		https://youtu.be/s_DzO6cnSiA	
			Karnaugh map minimization		https://youtu.be/SoIclFLNZwA	
			Quine McCluskey method of minimization -I		https://youtu.be/NXUkyPXvjMg	
			Quine McCluskey method of minimization -II		https://youtu.be/fSLr7DDDpCE	
EC8392 Digital Electronics	TPGIT Vellore	UNIT-II Combinational Circuit Design	Introduction to Combinational Circuits	Ms. B. Deepalakshmi, AP/ECE, TPGIT	https://youtu.be/KwZVZUYCE5A	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Half Adder and Full Adder		https://youtu.be/uAGGXDVSNXg	
			Half Subtractor and Full Subtractor	Ms. B. Deepalakshmi, AP/ECE, TPGIT	https://youtu.be/-lHOnDnjoSc	
			Parallel Adder and Subtractor		https://youtu.be/5pFrq308vyM	
			CLA		https://youtu.be/cSJmA9xibC0	
			BCD Adder	Ms. B. Deepalakshmi, AP/ECE, TPGIT	https://youtu.be/A2bNj9Y4t_Y	
			Multiplexer and Demultiplexer		https://youtu.be/whZm9waNRVY	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Magnitude Comparator		https://youtu.be/gbKVpNJ_Q9E	
			Encoder and Decoder		https://youtu.be/GV4MIt0O-go	
			Priority Encoder		https://youtu.be/jJJHGUC2GmU	
EC8392 Digital Electronics	TPGIT Vellore	Unit-III Synchronous Sequential Circuits	Introduction to Sequential Circuits	Prof.M.Janani, Assistant Professor/ECE, TPGIT. jananigms@gmail.com 9940788596	https://youtu.be/oDsHS3-jwlw	
			Latches		https://youtu.be/4XENHCaHeyo	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			SR Flip – Flop, D Flip - Flop		https://youtu.be/gOhOL62nekY	
			JK Flip – Flop, T Flip - Flop	Prof.M.Janani, Assistant Professor/ECE, TPGIT. jananigms@gmail.com 9940788596 7904020293	https://youtu.be/AT8_LVNTIo	
			Master Slave Flip - Flop Flip – Flop Conversion		https://youtu.be/ek4ZS1LU-z4	
			Analysis of Clocked Sequential Circuits		https://youtu.be/-BHy7jxhLvQ	
			Design of Clocked Sequential Circuits	Prof.M.Janani, Assistant Professor/ECE, TPGIT. jananigms@gmail.com	https://youtu.be/7qzWYeKdeng	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Moore/Mealy Models, State Minimization, State Assignment	9940788596	https://youtu.be/cPZ8nnjPkzs	
			Synchronous Counters		https://youtu.be/FQ9Hm_kAtj4	
			Ripple Counters	Prof.M.Janani, Assistant Professor/ECE, TPGIT. jananigms@gmail.com 9940788596 7904020293	https://youtu.be/aHWSb-LybTQ	
			Ring Counter, Johnson Counter		https://youtu.be/Xvz4idejrlk	
			Shift Registers		https://youtu.be/hOaKxOOKVgE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8392 Digital Electronics	TPGIT Vellore	Unit-IV Asynchronous Sequential Circuits	Asynchronous Sequential Circuit	R. Kesavraj., mail2kesavraj@gmail.com Ph – 9600440449	https://youtu.be/CW4L0HxIy8k	
			Stability of Circuit		https://youtu.be/cPfcL91Y2Zk	
			Hazards	R. Kesavraj., mail2kesavraj@gmail.com Ph – 9600440449	https://youtu.be/SaPiM0MeexY	
			Race and Cycle in asynchronous sequential circuits		https://youtu.be/RMPg2BLzEHY	
			Analysis Procedure with Example		https://youtu.be/rbKmg6kcGho	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8392 Digital Electronics	TPGIT Vellore	Unit-V Memory Devices and Digital Integrated Circuits	Basic Memory Structure and RAM - Static RAM and Dynamic RAM	Mrs.M.P.Sasirekha / (AP/ ECE) (PT) Ph.9585840671. mpsrekha83@gmail.com	https://www.youtube.com/watch?v=A7N-lO1OmKw	
			Basic Memory Structure and RAM - Static RAM and Dynamic RAM	Mrs.M.P.Sasirekha / (AP/ ECE) (PT) Ph.9585840671. Mail Id - mpsrekha83@gmail.com	https://www.youtube.com/watch?v=fYQSAWXy3vs&t=5s	
			ROM - PROM - EPROM - EEPROM - EAPROM		https://www.youtube.com/watch?v=7PElsGjNQ-c	
			ROM - PROM - EPROM - EEPROM - EAPROM		https://www.youtube.com/watch?v=biM5CBpFaWU&t=1s	
			Programmable Logic Devices - PAL , PLA		https://www.youtube.com/watch?v=1yfDu_oFHx4&t=1s	
			FPGA	Mrs.M.P.Sasirekha / (AP/ ECE) (PT) Ph.9585840671. Mail Id -	https://www.youtube.com/watch?v=vRgc0rA7im8&t=2s	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Digital Integrated Circuits , logic level, Propagation Delay, Power Dissipation , Fan in , Fan out , Noise Margin , logic	mpsrekha83@gmail.com	**https://www.youtube.com/watch?v=C4ULTtG00SU**	

5. EC8391 CONTROL SYSTEM ENGINEERING - GCE SRIRANGAM

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8391 Control System Engineering	GCE Srirangam	Unit-I System Components and Their Representation	Control System Definition, Basics	Dr. T.S. Murugesh Associate Professor tsmurugesh@gmail.com 9942058681	https://youtu.be/Y4wVS16nhm4	
			Open loop and closed control system		https://youtu.be/6aWTTs2KMQE	
			Feed forward and Feedback control Servo mechanisms, Multivariable control system		https://youtu.be/7iyyxCdfiCM	
			Electrical and Mechanical Transfer function models	Dr.M.Senthilkumar Assistant Professor senthilkumar.au@gmail.com 7200996030	https://youtu.be/aefh5yV18D4	
			problems on electrical and mechanical transfer function model		https://youtu.be/AbTkTRSu4EA	
			block diagram models	K. Bommaraju Assistant Professor/ECE	https://www.youtube.com/watch?v=L5FYKYBVZMQ	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			signal flow graph models	bommuraju@gmail.com 9944536426	https://youtu.be/GGYSW5eb8UI	
			Torque and Speed characteristics of AC Servo Motor	M. Elangovan Assistant Professor, m.elangovan@gcebargur.ac.in , 9080171523	https://youtu.be/mk52tTWVlZk	
			DC Servo Motor		https://youtu.be/M7qLmKgmWg8	
EC8391 Control System Engineering	GCE Srirangam	Unit-II Time Response Analysis	PID Control-Analytical design for PD, PI, PID control systems	Dr.M.Senthil kumar Assistant Professor senthilkumar.au@gmail.com 7200996030	https://youtu.be/gHH_uT8Je8A	
			Transient response-steady state response-Measures of performance of the standard first order and second order system	K.Bommaraju/ Assistant Professor/9944536426	https://youtu.be/Eorq4olWBQ4	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			second order system-effect on an additional zero and an additional pole-steady error constant and system- type number		https://youtu.be/o4d9v4dZ5NQ	
EC8391 Control System Engineering	GCE Srirangam	Unit-III Frequency Response and System Analysis	Closed loop frequency response-Performance specification in frequency domain-Frequency response of standard second order system	K.Bommaraju/ Assistant Professor 9944536426	https://youtu.be/jQ365-DPlKk	
			Bode Plot		https://youtu.be/R3FWTta9-lc	
			Polar Plot- Nyquist plots		https://youtu.be/_EDX8q9-e0w	
			Design of compensators using Bode Plots-Cascade lead compensation-Cascade lag compensation-Cascade lag-lead compensation		https://youtu.be/HJ6-NVh38i0	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8391 Control System Engineering	GCE Srirangam	Unit-IV Concepts of Stability Analysis	Concepts of stability - Bounded Input Bounded - Output stability, Routh stability criterion.	Dr.T.S.Murugesh/Associate Professor/tsmurugesh@gmail.com/9942058681	https://youtu.be/txobr8Z5TjE	
			Two Special Cases of Routh stability criterion, Relative Stability		https://youtu.be/znD44EvMyls	
			Root locus concept, Guidelines for sketching root locus.		https://youtu.be/0a_iXu3-_VU	
			Nyquist Stability Criterion	Dr.M.Senthilkumar/Assistant Professor/senthilkumar.au@gmail.com/7200996030	https://youtu.be/zTW4XjJyLSU	
EC8391 Control System Engineering	GCE Srirangam	Unit-V Control System Analysis Using State Variable Methods	State variable representation -Conversion of state variable models to transfer functions Conversion of transfer functions to state variable models-	K.Bommaraju/ Assistant Professor/9944536426	https://youtu.be/MDkVcDEdDFE	
			Bode Plot		https://youtu.be/R3FWTta9-lc	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Polar Plot- Nyquist plots	Dr.M.Senthilkumar AP /ECE senthilkumar.au@gmail.com 7200996030	https://youtu.be/_EDX8q9-e0w	
			Design of compensators using Bode Plots-Cascade lead compensation Cascade lag compensation-Cascade lag-lead compensation		https://youtu.be/HJ6-NVh38i0	

6. EC8395 COMMUNICATION ENGINEERING (CSE DEPT) - GCE THANJAVUR

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8395 Communication Engineering (CSE Dept)	GCE Thanjavur	Unit -I Analog Modulation	Introduction-Modulation	R. Ramji Asst. Professor ramji@gcetj.edu.in 9123540329	https://youtu.be/UyXENJZCdzs	
			Amplitude Modulation – AM		https://youtu.be/Rxtb4jrjx-c	
			DSBSC, SSBSC, VSB – PSD, modulators and demodulators		https://youtu.be/a9Nh4ekzgF0	
			Angle modulation – PM and FM – PSD, modulators and demodulators		https://youtu.be/wCgpbpl3tmQ	
			Super heterodyne Receivers	Muthumani I Professor and Head muthumanisubash14@g mail.com 9443087205	https://youtu.be/a002IBTrWGE	
EC8395 Communication Engineering (CSE Dept)	GCE Thanjavur	Unit -II PULSE MODULATION	Low pass Sampling Theorem, Quantization, PAM	R. Ramji Asst. Professor ramji@gcetj.edu.in 9123540329	https://youtu.be/cPDVhAJFkRI	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Line Coding Part-01	Muthumani I Professor and Head muthumanisubash14@gmail.com 9443087205	https://youtu.be/6UcCtqa4e8k	
			Line Coding Part-02		https://youtu.be/6qMAGdJoUtU	
			PCM, DPCM, DM, ADM	R. Ramji Asst. Professor ramji@gcetj.edu.in 9123540329	https://youtu.be/VxWJq0_mHlI	
			Channel Vocoder - Time Division Multiplexing, Frequency Division Multiplexing.		https://youtu.be/-6vp36e9Nhk	
EC8395 Communication Engineering (CSE Dept)	GCE Thanjavur	Unit -III Digital Modulation and Transmission	Phase shift keying – BPSK, DPSK, QPSK – Principles of M-arysignaling M-ary PSK & QAM	R.Ramji Asst.Professor ramji@gcetj.edu.in 9123540329	https://youtu.be/1pwOlI5-Qms	
			ISI – Pulse shaping – Duo binary encoding – Cosine filters –equalizers		https://youtu.be/gtA4_lxwMdg	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Eye pattern Part-01	Muthumani I Professor and Head muthumanisubash14 @g mail.com 9443087205	https://youtu.be/wPYy64PUpGE	
			Eye pattern Part-02		https://youtu.be/yswYJxRUUtA	
EC8395 Communication Engineering (CSE Dept)	GCE Thanjavur	Unit -IV INFORMATION THEORY AND CODING	Measure of information & Entropy	Muthumani I Professor and Head muthumanisubash14@g mail.com 9443087205	https://youtu.be/lM_r5TDKS6Q	
			Source coding theorem – Shannon Fano coding, Huffman Coding, LZ Coding Channel capacity Shannon Hartley law Shannon's limit	R.Ramji Asst.Professor ramji@gcetj.edu.in 9123540329	https://youtu.be/dDGQiTU3a_s	
			Error control codes – Cycliccodes, Syndrome calculation Convolution Coding, Sequential and Viterbi decoding		https://youtu.be/io49S76b_wg	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8395 Communication Engineering (CSE Dept)	GCE Thanjavur	Unit -V SPREAD SPECTRUM AND MULTIPLE ACCESS	1)Lecture 16 PN sequences – properties – m-sequence – DSSS – Processing gain, Jamming – FHSS – Synchronisation and tracking	R.Ramji Asst.Professor ramji@gcetj.edu.in 9123540329	https://youtu.be/KbHyClx3Hd8	
			2)Lecture 17 Multiple Access – FDMA, TDMA, CDMA		https://youtu.be/dXNnGlQ-74c	

III YEAR – V SEMESTER

PROFESSIONAL CORE COURSES

7. EC8501 DIGITAL COMMUNICATION - GCE THANJAVUR

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8501 Digital Communication	GCE Thanjavur	Unit-I Information Theory	Information theory Introduction	K. Renugadevi /AP renu.sks90@gmail.com 7904572661	https://youtu.be/hbN3nhocrL8	
			Discrete Memoryless Channel		https://youtu.be/L9ulwsYYBAU	
			Source Coding		https://youtu.be/eBeP6RkyRhI	
			Problems in Unit 1		https://youtu.be/f91yNo6IY0Y	
EC8501 Digital Communication	GCE Thanjavur	Unit-II Waveform Coding & Representation	1) Prediction filtering	K. Renugadevi /AP renu.sks90@gmail.com 7904572661	https://youtu.be/ji93TjINPOU	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			2) DPCM		https://youtu.be/SkpXbUMFqac	
			3) Delta Modulation		https://youtu.be/YEGxzQOQufM	
			4) ADPCM & ADM principles	K. Renugadevi /AP renu.sks90@gmail.com 7904572661	https://youtu.be/keUXkx3JioU	
			5) Linear Predictive Coding		https://youtu.be/iZ6wSDOhYXs	
			6) Line codes		https://youtu.be/SWux9RpZvO4	
Digital Communications	GCE Thanjavur	Unit-III Baseband Transmission and Reception	1) Inter-Symbol Interference	K. Renugadevi /AP renu.sks90@gmail.com 7904572661	https://youtu.be/rXbbvz-zoTI	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			2) Nyquist Criterion for Distortion less baseband transmission		https://youtu.be/QjEC3xUa2N8	
			3)Correlative coding		https://youtu.be/OyMlfeLZHX4	
			4)Eye pattern	K. Renugadevi /AP renu.sks90@gmail.com 7904572661	https://youtu.be/UsLH3CbkPPs	
			5)Matched filter		https://youtu.be/H5zayGDTE9E	
			6)Adaptive equalization		https://youtu.be/-nF4uSfEUiQ	
Digital Communications	GCE Thanjavur	Unit-IV DIGITAL MODULATION SCHEME	1)Geometric Representation of signals	K. Renugadevi AP/ECE renu.sks90@gmail.com 7904572661	https://youtu.be/JN93LvxJGs4	
			)BPSK		https://youtu.be/4uu3DJ5y2xk	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			3)BFSK		https://youtu.be/4uu3DJ5y2xk	
			QPSK and QAM		https://youtu.be/MXx7M3Ssti8	
			5)Carrier Synchronization	K. Renugadevi AP/ECE renu.sks90@gmail.com 7904572661	https://youtu.be/wc3FdTscr4M	
			6)Structure of Non-coherent Receivers		https://youtu.be/CUtU6V7z_Vw	
			7)Principle of DPSK		https://youtu.be/KT01UfoZvWc	
Digital Communications	GCE Thanjavur	Unit-V Error Control Coding	1)Channel coding theorem	K.Renugadevi/AP renu.sks90@gmail.com 7904572661	https://youtu.be/ZwuFPYQrobQ	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			2)Linear block codes		https://youtu.be/37K2TsxUOaY	
			3)Convolutional codes		https://youtu.be/OxZHSVkjoYA	

8. EC8553 DISCRETE-TIME SIGNAL PROCESSING - GCE DHARMAPURI

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8553 Discrete-Time Signal Processing	GCE Dharmapuri	Unit-I Discrete Fourier Transform	Introduction to DTSP	Vijayakumar. M AP/ECE 8610289300 mvk.gct@gmail.com	https://youtu.be/pCYk5qz_14k	
			Introduction to DTSP Summary of analysis equations for FT & DTFT		https://youtu.be/uk73mhXhgzc	
			Review of signals		https://youtu.be/rtIZKF2BKls	
			Review of systems		https://youtu.be/DulkgqZv4jE	
			Properties of DFT: Periodicity, symmetry, Linearity		https://youtu.be/UNOyKaeYfHs	
			Properties of DFT: Time Reversal, circular convolution. Linear filtering using DFT		https://youtu.be/dRIZja6jitk	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Filtering long data sequences: Overlap save Method	Vinod. A & Vijayakumar. M AP/ECE 8610289300 mvk.gct@gmail.com	https://youtu.be/ovHn5lZmZGk	
			Overlap add method		https://youtu.be/dYbusz2ngOU	
			Circular Convolution		https://youtu.be/5FrLBRk4j4E	
			Discrete Fourier transform (DFT), Concept of frequency in discrete- time signals	Vinod. A AP/ECE 866780347 vinodnash@gmail.com	https://youtu.be/Mj6zhfxW2jo	
			Frequency domain sampling, Deriving DFT from DTFT,		https://youtu.be/sRtVbGvDS4o	
			Fast computation of DFT: Radix-2 Decimation-in-time (DIT) Fast Fourier transform (FFT)		https://youtu.be/RYqnlL5F0jg	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Fast Fourier transform (FFT) Radix-2 Decimation in Frequency (DIF) Fast Fourier transform (FFT) Linear filter using FFT.		https://youtu.be/TxHapct5BUQ	
EC8553 Discrete-Time Signal Processing	GCE Dharmapuri	Unit-II INFINITE IMPULSE RESPONSE FILTERS	Characteristics of practical frequency selective filters Characteristics of commonly used analog filters	Vijayakumar. M AP/ECE 8610289300 mvk.gct@gmail.com	https://www.youtube.com/watch?v=SwzurhYcj8E&t=202s	
			Bilinear transformation		https://www.youtube.com/watch?v=LOv5l-z-fEA&t=1695s	
			Chebyshev filters		https://youtu.be/NpqWxpKBEn8	
			Structure of IIR filters: Direct from I, direct from II, cascade, parallel realizations	VINOD.A AP/ECE 866780347 vinodnash@gmail.com	https://youtu.be/u1LthtURyoU	
			Design of IIR filters from analog filters (LPF, HPF, BPF, BRF) - using Butterworth filters	VIJAYAKUMAR. M AP/ECE 8610289300	https://www.youtube.com/watch?v=kCnRpuo3zIg&t=1757s	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
				mvk.gct@gmail.com	https://www.youtube.com/watch?v=9QUrjrtqyYA&t=492s	
			Frequency transformation in the analog domain- impulse invariant method		https://www.youtube.com/watch?v=aNvtI6k0K8A&t=2112s	
			Approximation of derivatives		https://youtu.be/wMpqtdw2znE	
EC8553 Discrete-Time Signal Processing	GCE Dharmapuri	Unit-III FINITE IMPULSE RESPONSE FILTERS	Design of FIR filters Symmetric and Anti- symmetric FIR filters	VIJAYAKUMAR.M / AP 8610289300 mvk.gct@gmail.com	https://youtu.be/P88l-k-9iNc	
			Design of linear phase FIR filters using Fourier series method		https://youtu.be/MNZPhoNKiyU	
			FIR filter design using windows (Rectangular, Hamming and Hanning window)	VINOD.A AP/ECE 866780347 vinodnash@gmail.com	**https://youtu.be/v3NCyH2sDME**	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Frequency sampling method	VIJAYAKUMAR.M / AP 8610289300 mvk.gct@gmail.com	https://youtu.be/zZHkOkM-VsU	
			FIR filter structures		https://youtu.be/lRCByawy7Lk	
EC8553 Discrete-Time Signal Processing	GCE Dharmapuri	Unit-IV FINITE WORD LENGTH EFFECTS	Fixed point and floating-point number representation	VINOD.A AP/ECE 866780347 vinodnash@gmail.com	**https://youtu.be/WYOYcw8XVqg**	
			Quantization Truncation and rounding Quantization noise Input/output quantization		**https://youtu.be/ijN1zzzC2wA**	
			Product quantization error		**https://www.youtube.com/watch?v=srvNapYcH6s**	
			Coefficient quantization error , ADC Overflow error	VINOD.A AP/ECE 866780347 vinodnash@gmail.com	**https://youtu.be/EAI4e9Gfse0**	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Limit cycle oscillations due to product quantization and summation		**https://youtu.be/B7ccZuixToM**	
			Scaling to prevent overflow		**https://youtu.be/39EUZoyesck**	
EC8553 Discrete-Time Signal Processing	GCE Dharmapuri	Unit-V Introduction to Digital Signal Processors	**5.1** DSP functionalities, circular buffering	VINOD.A AP/ECE 866780347 vinodnash@gmail.com	https://www.youtube.com/watch?v=pznICMhJ5m8	
			5.2 DSP Architecture		https://www.youtube.com/watch?v=9D52YfYOCos	
			5.3 Fixed- and Floating-point architecture principles		https://youtu.be/yKwWuSf-IdM	
			5.4 Programming	VINOD.A AP/ECE 866780347	https://www.youtube.com/watch?v=yBK3GeJgygk	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			5.5 Application examples	vinodnash@gmail.com	**https://www.youtube.com/watch?v=iLTE5Rlh2F4**	

9. EC8551 COMMUNICATION NETWORKS - GCE THANJAVUR

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8551 Communication Networks	GCE Thanjavur	Unit-I Fundamentals and Link Layer	Introduction	DINESH AP / ECE dineshcolours@gmail.com 9894173017	https://youtu.be/4k_Qn0b8b8o	
			Overview of Data Comm part-1		https://youtu.be/ssVKrk-FaHI	
			Overview of Data Comm part-2		https://youtu.be/BgTQgSzNmUM	
			Networks Building n/w Types of n/w Overview of Internet		https://youtu.be/X1gwIUA7ZeI	
			Protocol Layering OSI model Physical layer		https://youtu.be/mR_BQi2YB1Y	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Overview of data signals	K. MANIKANDAN AP/ECE kmanikandan028@gmail.com 7708455046	https://youtu.be/yfi9guEuLiU	
			Introduction to data link layer	K. MANIKANDAN AP/ECE kmanikandan028@gmail.com 7708455046	https://youtu.be/R4VwWZPQoso	
			Link layering Addressing Error control Correction		https://youtu.be/0JSeIpL466A	
EC8551 Communication Networks	GCE Thanjavur	Unit-II Media Access & Internetworking	1) OVERVIEW OF DATALINK CONTROL	A.DINESH AP/ECE dineshcolours@gmail.com 9894173017	https://youtu.be/D0hpJ1uGzBk	
			2) MEDIA ACCESS CONTROL		https://youtu.be/nBJQOct4cQE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			3) ETHERNET(802.3) – WIRELESS LANs – AVAILABLE PROTOCOLS		https://youtu.be/bqGTNnzXH2I	
			4) BLUETOOTH LOW ENERGY – Wi-Fi – 6LOWPAN–ZIGBEE		https://youtu.be/9FvvUitlXv0	
			5) Network layer services	K.MANIKANDAN AP/ECE Kmanikandan028@gmail.com 7708455046	https://youtu.be/FUqlauUoLpI	
			6) Packet switching		https://youtu.be/GEOCFU7kLt4	
			7) IPv4 Addresses		https://youtu.be/O9ctrwaHciE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			8) IP and Mobile IP		https://youtu.be/IsrJC0ykceI	
			9) ICMP		https://youtu.be/z2Csvdw81Ms	
EC8551 Communication Networks	GCE Thanjavur	Unit-III ROUTING	1) Routing – Unicast Routing– Algorithms	A.DINESH AP/ECE dineshcolours@gmail.com 9894173017	https://youtu.be/w2UJRSk2GtM	
			2) Protocols –Multicast Routing and its basics	A.DINESH/AP dineshcolours@gmail.com 9894173017	https://youtu.be/EU7S_pXfnnA	
			3) Overview of Intradomain and interdomain protocols	K.MANIKANDAN AP/ECE Kmanikandan028@gmail.com	https://youtu.be/cWM04k-lzyY	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			4)Overview of IPv6 Addressing	7708455046	https://youtu.be/XNGo14VTx1E	
			5) Transition from IPv4 to IPv6		https://youtu.be/CPJZRtqCgOQ	
EC8551 Communication Networks	GCE Thanjavur	Unit-iV TRANSPORT LAYER	Introduction to Transport layer	A.DINESH/AP dineshcolours@gmail.com 9894173017	https://youtu.be/OjQrrHAcrrQ	
			2) Protocols –Multicast Routing and its basics	A.DINESH/AP dineshcolours@gmail.com 9894173017	https://youtu.be/yC1MKMdoGh0	
			3) Overview of Intradomain and interdomain protocols	K.MANIKANDAN AP/ECE Kmanikandan028@gmail.com 7708455046	https://youtu.be/wH5Xpb9VaCY	
			4) State Transition Diagram		https://youtu.be/ws4_g3b4PYE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			5) Flow, Error and Congestion Control		https://youtu.be/cf4z9hdKz14	
			6) Congestion avoidance (DECbit, RED)		https://youtu.be/HkmznKIkhVQ	
			7) QoS – Application requirements		https://youtu.be/uy2HjwR715w	
EC8551 Communication Networks	GCE Thanjavur	Unit-V APPLICATION LAYER	1) Application Layer Paradigms – Client Server Programming	A.DINESH/AP dineshcolours@gmail.com 9894173017	https://youtu.be/RrbhgQPboiI	
			2) World Wide Web and HTTP	A.DINESH/AP dineshcolours@gmail.com 9894173017	https://youtu.be/7x1b3KGmKI0	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			3)DNS		https://youtu.be/fuD9FuztvL4	
			4) Electronic Mail (SMTP, POP3, IMAP, MIME)	K.MANIKANDAN AP/ECE Kmanikandan028@gmail.com 7708455046	https://youtu.be/LP66Zr6dGPE	
			5) Introduction to Peer to Peer Networks		https://youtu.be/FpVhtC2IYpQ	
			6) Need for Cryptography and Network Security		https://youtu.be/3cRXcqcFWeQ	
			7) Firewalls.		https://youtu.be/oQF-OjQug8U	

10. EC8552 COMPUTER ARCHITECTURE AND ORGANIZATION - GCE TIRUNELVELI

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8552 Computer Architecture and Organization	GCE Tirunelveli	Unit-I Computer Organization & Instructions	Introduction to the course	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=YPOHLOt2LVs	
			Basics of a computer system		https://www.youtube.com/watch?v=y8KFoDiJWEA	
			Great Ideas of computer Architecture	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=0DRYiUj5y94	
			Performance		https://www.youtube.com/watch?v=I0Jv8X2oGXo	
			Performance Equations		https://www.youtube.com/watch?v=X8tnRduWJv8	
			The power wall		https://www.youtube.com/watch?v=7ubfLt0ETfg	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			The sea change- Uniprocessor to multiprocessor	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=48aXIUA9SmE	
			Instruction set-1		https://www.youtube.com/watch?v=BI03Ap4zhbM	
			Instruction set-2		https://www.youtube.com/watch?v=RG0hZ51aXoM	
			Addressing modes		https://www.youtube.com/watch?v=YPOHLOt2LVs	
EC8552 Computer Architecture and Organization	GCE Tirunelveli	Unit-II Arithmetic	Fixed Point Arithmetic -Addition	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=tiMYHbwOx5g	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Fixed Point Arithmetic-Multiplication	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=xqyXtpYvICE	
			Fixed Point Arithmetic-Division		https://www.youtube.com/watch?v=RG20AOtW4pQ	
			Floating Point Representation		https://www.youtube.com/watch?v=i7ryzGTGYsg	
			Floating Point Representation-Biased Notation		https://www.youtube.com/watch?v=_5pUIpGmczY	
			Floating Point Representation-Addition and Multiplication		https://www.youtube.com/watch?v=1S7kCEhiics	
EC8552 Computer Architecture and Organization	GCE Tirunelveli	Unit-III THE PROCESSOR	Introduction	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=IWacwTKJs9E	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Logic Design Conventions		https://www.youtube.com/watch?v=-M3Q2VMIJcA	
			Building a Datapath		https://www.youtube.com/watch?v=-HhxxpKQ6V8	
			A simple implementation Scheme	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=5sLuR4v4UwY	
			Operation of the datapath		https://www.youtube.com/watch?v=NDEfaXENKUY	
			Pipelining		https://www.youtube.com/watch?v=EMPJpoVfuII	
EC8552 Computer Architecture and Organization	GCE Tirunelveli	Unit-IV MEMORY AND I/O ORGANIZATION	Structure of a Real Time System	A Alice Blessie AP/ECE (Part-Time)	https://www.youtube.com/watch?v=bUiVJE2ZlbI	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Estimating program run times	blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=IAyLcw1Aj3M	
			Task Assignment & Scheduling		https://www.youtube.com/watch?v=BuUP7csqDxg	
			Reliability & Fault Tolerance Techniques		https://www.youtube.com/watch?v=wR3xKl3oiAg	
			Clock Synchronisation	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=k0LLTeeZLg8	
			Logical Clock Synchronisation		https://www.youtube.com/watch?v=1wJYDyPQQno	
EC8552 Computer Architecture and Organization	GCE Tirunelveli	Unit-V Advanced Computer Architecture	Parallel processing architectures and challenges	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=yNEz021K53A	
			Hardware multithreading		https://www.youtube.com/watch?v=ezKtsiP8Jyo	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Multicore and shared memory multiprocessors		https://www.youtube.com/watch?v=DxtsJDT9kbY	
			Introduction to Clusters, warehouse scale computers and other message passing systems	A Alice Blessie AP/ECE (Part-Time) blessiharris@gmail.com 9003659736	https://www.youtube.com/watch?v=qQ1ddMkajHk	
			Introduction to multiprocessor network topologies		https://www.youtube.com/watch?v=CwsGulmzDG8	
			Introduction to graphics Processing Units		https://www.youtube.com/watch?v=ZhJcbscMoo0	

11. EC8691 MICROPROCESSOR AND MICROCONTROLLER (FOR CSE DEPT) - TPGIT VELLORE

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8681 Microprocessor and Microcontroller (CSE Dept)	TPGIT Vellore	Unit-I THE 8086 Microprocessor	Microprocessor Architecture	C. Padmavathi AP (PT) / ECE Ph-8072200367 padmavathic1990@gmail.com	https://www.youtube.com/watch?v=HLaD1lcLejQ&t=97s	
			Addressing modes		https://www.youtube.com/watch?v=AEId0mXwuxs&t=173s	
			Instruction set 1		https://www.youtube.com/watch?v=fIzjKgCbvn0	
			Instruction set 2	C. Padmavathi AP (PT) / ECE Ph-8072200367 padmavathic1990@gmail.com	https://www.youtube.com/watch?v=SGJxd8K4tPI&t=12s	
			Assembler Directives		https://www.youtube.com/watch?v=_G340LEg_Bo	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Modular Programming		https://www.youtube.com/watch?v=3hjUgB4u3uM&t=8s	
			Linking and relocation	C. Padmavathi AP (PT) / ECE Ph-8072200367 padmavathic1990@gmail.com	https://www.youtube.com/watch?v=wF3RF_Un29U&t=230s	
			Interrupt and Interrupt service Routine		https://www.youtube.com/watch?v=e8_D8N1rvIM	
			Stacks, Procedure, Macros		https://www.youtube.com/watch?v=Ypv_m2N8xQc	
EC8681 Microprocessor and Microcontroller (CSE Dept)	TPGIT Vellore	Unit-II 8086 SYSTEM BUS STRUCTURE	8086 Signals	J.Sundaravanan, AP/ECE, TPGIT 9444089275 sundaravanan@gmail.com	https://youtu.be/eQxJbie4_tI	
			8086 Basic Configurations		https://youtu.be/g2KYtfAztfE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			8086 Bus Timings		https://youtu.be/s8vnPuMYqaw	
			8086 IO Programming	J.Sundaravanan, AP/ECE, TPGIT 9444089275 sundaravanan@gmail.com	https://youtu.be/GE5dbMAkCI4	
			Introduction to multiprogramming		https://youtu.be/CnsKnCbLi5k	
			8086 Multiprocessor Configuration		https://youtu.be/ruzXzTUNXEU	
			8086 Coprocessor Closely coupled configuration	J.Sundaravanan, AP/ECE, TPGIT 9444089275 sundaravanan@gmail.com	https://youtu.be/KkpRYBqqbBw	
			8086 Loosely Coupled Configuration		https://youtu.be/8vJsr_1smHk	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Introduction to Advanced Processors		https://youtu.be/ket4LpuLWqg	
EC8681 Microprocessor and Microcontroller (CSE Dept)	TPGIT Vellore	Unit-III I/O INTERFACING	Memory and IO Interfacing	J.Sundaravanan, AP/ECE, 9444089275 sundaravanan@gmail.com	https://youtu.be/MYtyX8-RxKU	
			Parallel Communication Interface		https://youtu.be/3B_jpNtYINE	
			Serial Communication Interface		https://youtu.be/yCBUoPQZ2mc	
			8086 with ADC and DAC interface	J.Sundaravanan, AP/ECE, TPGIT 9444089275 sundaravanan@gmail.com	https://youtu.be/nL8wkjlXv2s	
			Timer		https://youtu.be/qYVyktNkqNI	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Alarm Controller		https://youtu.be/KzV1t8PuU3Q	
			Keyboard /display controller (8279)	S.Krithiga, Assistant Professor, ECE, TPGIT krithiga.sri@gmail.com 9710907221	https://youtu.be/wjwzTTvLNxE	
			8279 commands		https://youtu.be/Bg_CSvxe7GY	
			Programmable Interrupt Controller (8259A)	S.Krithiga, Assistant Professor, ECE, TPGIT krithiga.sri@gmail.com 9710907221	https://youtu.be/Oro6vU1GFEY	
			Direct Memory Access Controller 8237		https://youtu.be/b3-NRFCX9JQ	
			Traffic Light Controller		https://youtu.be/Lzr7jNjj0xw	
			Interfacing LED Display		https://youtu.be/7q7oDzdIE2w	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Interfacing LCD Display	S.Krithiga, Assistant Professor, ECE, TPGIT krithiga.sri@gmail.com 9710907221	https://youtu.be/4v1qAyajBRM	
			Interfacing keyboard		https://youtu.be/HlbOWcDAl5s	
EC8681 Microprocessor and Microcontroller (CSE Dept)	TPGIT Vellore	Unit-IV Microcontroller	Introduction of 8051 - Pin Diagram of 8051 - I/O Pins Ports	R.G.Venkatesan Assistant Professor(PT) 9944185450, venkatesanrg78@gmail.com	https://youtu.be/LeVPH5QHMOw	
			Architecture of 8051 – SFRS		https://youtu.be/CK-2rJtnUk0	
			Instruction set of 8051		https://youtu.be/AOsjiCBGrd4	
			Addressing Modes - Assembly Language Programming		https://youtu.be/FMVtaAh_iJ8	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8681 Microprocessor and Microcontroller (CSE Dept)	TPGIT Vellore	Unit-V Interfacing microcontrollers	Programming 8051 timers	Ms. E. Epitha AP/ECE(adhoc) Ph.7867054007 epitha51@gmail.com	https://youtu.be/2PBzxqLfiu4	
			Serial Port programming		https://youtu.be/RaA9t1-HG0U	
			Interrupts programming		https://youtu.be/92BK-Ds7d_g	
			LCD & Keyboard interfacing	Ms. E. Epitha AP/ECE(adhoc) Ph.7867054007 epitha51@gmail.com	https://youtu.be/7ZXaTILfNsA	
			Sensor interfacing		https://youtu.be/2Hd5pzu4HTA	
			External memory interfacing		https://youtu.be/KRwH6wKRk7M	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			ADC &DAC interfacing with 8051	Ms.I.Vandhana, AP/ECE(adhoc) Ph-8754878048 vandhanababie@gmail.com	https://youtu.be/jZMZ5_qPD10	
			Stepper motor		https://youtu.be/b3czWziRwJc	
			Comparisons of Microprocessor and Microcontroller		https://youtu.be/Fecp7ps0RXA	
			PIC Processor	Ms.I.Vandhana, AP/ECE(adhoc) Ph-8754878048 vandhanababie@gmail.com	https://youtu.be/Px6kY3zzZ8I	
			ARM Processor		https://youtu.be/-dEbNJziUw8	

12. EC8073 MEDICAL ELECTRONICS - GCE DHARMAPURI

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8073 Medical Electronics	GCE Dharmapuri	Unit-I Electro-Physiology and Bio-Potential Recordings	Introduction to Biomedical Instrumentation Structure of Human Cell Bio signals and Bio potential Action Potential Cycle	Dr. R. Thiyagarajan Associate Professor 9488493819 thiyagucdm@gmail.com	https://youtu.be/OgtbKD9--U0	
			Bio potential Electrode	Mr.T.Balamurugan Assistant professor 9894753231 balamurugan.thiyagu@gmail.com	https://youtu.be/U3gxhINJm0U	
			Biological Amplifier		https://youtu.be/xkubykK_0R8	
			ECG and PCG	Dr. M. Arivamudhan Associate Professor 9842565051 aumaei@gmail.com	https://youtu.be/LJa2n7j9la8	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			EEG and EMG		https://www.youtube.com/watch?v=oflkBmtw5pc	
			Introduction to Biomedical Instrumentation Structure of Human Cell Bio signals and Bio potential Action Potential Cycle	Dr. R. Thiyagarajan Associate Professor 9488493819 thiyagucdm@gmail.com	https://www.youtube.com/watch?v=U_FjyfT-yll	
EC8073 Medical Electronics	GCE Dharmapuri	Unit-II Bio-Chemical and Non-Electrical Parameter Measurement	pH, PO2, PCO2	Mr.T.Balamurugan Assistant professor 9894753231 balamurugan.thiyagu@gmail.com	https://youtu.be/vU_TRlN8XcY	
			Colorimeter	Mr.T.Balamurugan Assistant professor 9894753231 balamurugan.thiyagu@gmail.com	https://youtu.be/7gVtszG5ad0	
			Cardiac output	Mr.T.Balamurugan Assistant professor 9894753231 balamurugan.thiyagu@gmail.com	https://youtu.be/lT0ajgkuyy4	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Respiratory,	Mr.T.Balamurugan Assistant professor 9894753231 balamurugan.thiyagu@gmail.com	https://youtu.be/0lTOj7C-2rg	
			Temperature.		https://youtu.be/BgIkw1h_QlQ	
			pulse measurement.		https://youtu.be/eBODYEsgu-w	
			Blood Cell Counters.		https://youtu.be/hSwmwzb5t_U	
EC8073 Medical Electronics	GCE Dharmapuri	Unit-III ASSIST DEVICES	Cardiac pacemakers and DC Defibrillator	Dr. M.Arivamudhan Associate Professor 9842565051 aumaei@gmail.com	https://www.youtube.com/watch?v=wOWA4tUXazM	
			Dialyser, Ventilators	Dr. M.Arivamudhan Associate Professor 9842565051 aumaei@gmail.com	https://www.youtube.com/watch?v=l2wMiVAvL6g	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Magnetic Resonance Imaging Systems	Dr. M.Arivamudhan Associate Professor 9842565051 aumaei@gmail.com	https://www.youtube.com/watch?v=eijQZJ8SH9w&t=2s	
			Ultrasonic Imaging Systems	Dr. M.Arivamudhan Associate Professor 9842565051 aumaei@gmail.com	https://www.youtube.com/watch?v=HbxvrWAZmQ8	
EC8073 Medical Electronics	GCE Dharmapuri	Unit-IV Physical Medicine and Biotelemetry	Diathermy and its applications Microwave Diathermies	Dr. R. Thiyagarajan Associate Professor 9488493819 thiyagucdm@gmail.com	https://youtu.be/IgRVdjtga2U	
			Ultrasonic Diathermy	Mr.T.Balamurugan Assistant professor 9894753231 balamurugan.thiyagu@gmail.com	https://youtu.be/w4kpSwF_bBU	
			Surgical diathermy		https://youtu.be/u4jNiARbwOI	
			Biotelemetry	Mr.T.Balamurugan Assistant professor 9894753231 balamurugan.thiyagu@gmail.com	https://youtu.be/wMfSgsBqBd8	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8073 Medical Electronics	GCE Dharmapuri	Unit-V Recent Trends in medical Instrumentation	Recent Trends in Biomedical Instrumentation Tele medicine	Dr. R. Thiyagarajan Associate Professor 9488493819 thiyagucdm@gmail.com	https://youtu.be/PMXvVco1sko	
			Insulin Pump, Radio pill, Endomicroscopy, Brain machine interface, Lab-on-a-Chip	Dr. R. Thiyagarajan Associate Professor 9488493819 thiyagucdm@gmail.com	https://youtu.be/lclmQibhjz0	

13. EC8074 ROBOTICS AND AUTOMATION - GCE THANJAVUR

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8074 Robotics and Automation	GCE Thanjavur	Unit-I Foundation for Beginners	Introduction	Dr. A. Asokan Assoc Prof asokan2k7@gmail.com 9150376648	https://www.youtube.com/watch?v=WcanCAmpOC0	
			Introduction – Brief history, definition		https://www.youtube.com/watch?v=MA6VR_HskL4	
			Anatomy		https://www.youtube.com/watch?v=FokQPlJfkfc	
			Types, classification		https://www.youtube.com/watch?v=cm7eLXVM8Ig	
			Specification	Dr. A. Asokan Assoc Prof asokan2k7@gmail.com 9150376648	https://www.youtube.com/watch?v=4t_P271Dj_Y	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Role and need of robots for the immediate problems of the society, future of mankind and automation		https://www.youtube.com/watch?v=z15yCsmLOgI&t=9s	
			Ethical issues industrial scenario local and global		https://www.youtube.com/watch?v=8ShW6uuvZjI	
			Case studies on mobile robot research platform and industrial serial arm manipulator		https://www.youtube.com/watch?v=Gzjz8aqmSN8	
EC8074 Robotics and Automation	GCE Thanjavur	Unit-II BUILDING BLOCKS OF A ROBOT	Types of electric motors - DC, Servo, specification, drives for motors - speed & direction control and circuitry	S Mohan AP/ECE mohanthefire@gmail.com 9789548001	https://www.youtube.com/watch?v=dCcQGFyAi-Q	
			Stepper motor		https://www.youtube.com/watch?v=G-ZjoKhvYos	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Selection criterion for actuators, direct drives, non-traditional actuators;		https://www.youtube.com/watch?v=YKjiBu5rIu4	
			4) Sensors for localization, navigation obstacle avoidance and path planning in known and unknown environments		https://www.youtube.com/watch?v=YGLE5GVcUhk	
			5) optical, inertial, thermal, chemical, biosensor, other common sensors;	S Mohan AP/ECE mohanthefire@gmail.com 9789548001	https://www.youtube.com/watch?v=zAdgFoqX6Ec	
			6) Case study on choice of sensors and actuators for maze solving robot and self-driving cars		https://www.youtube.com/watch?v=Mjh9IXg0Z38	
			7) servo motor		https://www.youtube.com/watch?v=F0S9_BnqtRE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			8) other common sensors in robotics		https://www.youtube.com/watch?v=EyjOtLEMcjc	
EC8074 Robotics and Automation	GCE Thanjavur	Unit-III Kinematics, Dynamics and Design of Robots and End-Effectors	Kinematics of WMR	S Mohan AP/ECE mohanthefire@gmail.com 9789548001	https://www.youtube.com/watch?v=sLUOGWfkdtw	
			2) D H Representation	S Mohan AP/ECE mohanthefire@gmail.com 9789548001	https://www.youtube.com/watch?v=KY6wVCIu1z4	
			3) D H Parameters		https://www.youtube.com/watch?v=MAP_438ia2Y	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			4) Lagrangian formulation		https://www.youtube.com/watch?v=1R0wT-S9Vhs	
			5) End Effector		https://www.youtube.com/watch?v=mTooo1xug6I	
EC8074 Robotics and Automation	GCE Thanjavur	Unit-IV Navigation Path Planning and Control Architecture	Slam, Control Architecture, Behavior based control, Path planning for serial manipulator	Dr.A.Asokan Assoc Prof asokan2k7@gmail.com 9150376648	https://www.youtube.com/watch?v=Orz31qB3z7w&t=38s	
			Application of Neural Network, Optimization Algorithm, Programming Methodology,		https://www.youtube.com/watch?v=CygqxMnGnq4	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Application of Fuzzy logic, Optimization Algorithm, Programming Methodology,	S Mohan AP/ECE mohanthefire@gmail.com 9789548001	https://www.youtube.com/watch?v=dLltc_lfV5E	
			mobile robot programming		https://www.youtube.com/watch?v=VBtKZi6sJyc	
EC8074 Robotics and Automation	GCE Thanjavur	Unit-V AI And Other Research Trends in Robotics	Application of Machine learning - AI	Dr.A.Asokan Assoc Prof asokan2k7@gmail.com 9150376648	https://www.youtube.com/watch?v=THr1PguQ5_A	
			Application of Machine learning - Expert systems	Dr.A.Asokan Assoc Prof asokan2k7@gmail.com 9150376648	https://www.youtube.com/watch?v=Uu0CxWNAQ2Q	
			Tele-robotics and Virtual Reality;	Dr.A.Asokan Assoc Prof asokan2k7@gmail.com	https://www.youtube.com/watch?v=6YkNpgboEjo	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			4) Micro & Nanorobots	9150376648	https://www.youtube.com/watch?v=24m2kFyCE54	
			5) Cognitive robotics		https://www.youtube.com/watch?v=wH6Jdspg2Mw	
			6)Evolutionary robotics: Humanoids		https://www.youtube.com/watch?v=1a7UUZZLGQc&t=9s	

OPEN ELECTIVES – V SEMESTER

14. OMD551 BASICS OF BIOMEDICAL AND INSTRUMENTATION - TPGIT VELLORE

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
OMD551 Basics of Biomedical and Instrumentation	TPGIT Vellore	Unit I Bio Potential Generation and Electrodes Types	Origin of bio potential and its propagation -I	Dr. R. Dhanalakshmi, AsP/ECE dhanavishnu02@gmail.com 9486834936	https://youtu.be/4KcXhtPtjso	
			Origin of bio potential and its propagation -II		https://youtu.be/z5dFlKQkgik	
			Origin of bio potential and its propagation -III		https://youtu.be/-sk8UVgztkA	
			Types of electrodes		https://youtu.be/lO44TYnXt8Y	
			surface electrodes and its equivalent circuit		https://youtu.be/nBaB5o9jbvA	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Needle electrodes and its equivalent circuit		https://youtu.be/bLWl2OjegkI	
			Micro electrodes and its equivalent circuit		https://youtu.be/jwNWcSpXTnE	
			Recording problems measurement with two electrodes	Dr. R. Dhanalakshmi, AsP/ECE dhanavishnu02@gmail.com 9486834936	https://youtu.be/beoJph5t5YY	
OMD551 Basics of Biomedical and Instrumentation	TPGIT Vellore	Unit II Bio signal Characteristics and Electrode Configurations	ECG	Prof. K. Beulah Suganthy, Asso.Prof /ECE TPGIT 9442344873 beulahsuganthy@yahoo.com	https://youtu.be/qAvvbnZiXYw	
			EEG		https://youtu.be/X40nesTwaXk	
			EMG		https://youtu.be/bTKrkBOkMl0	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
OMD551 Basics of Biomedical and Instrumentation	TPGIT Vellore	Unit III Signal Conditioning Circuits	Need for bio amplifier in biomedical	Mrs.M.Geetha, AP/ECE, TPGIT rgeetha1409@gmail.com Ph:7845262577	https://youtu.be/pSlHGCex1iY	
			Differential Amplifier in Biomedical		https://youtu.be/oEbI6VYP2gM	
			Impedance Matching Circuits in Biomedical		https://youtu.be/zwUy4d5GhoI	
			Isolation Amplifier In biomedical		https://youtu.be/NaJ6bA31220	
			Power Line Interference in Biomedical		https://youtu.be/Sh7j_2NHODY	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Right leg driven ECG amplifier		https://youtu.be/jcISdDYekEw	
			Band pass filter in Biomedical		https://youtu.be/TpkzrLx1tIg	
OMD551 Basics of Biomedical and Instrumentation	TPGIT Vellore	Unit IV	Temperature Measurement	Mrs. D.Komathi, AP/ECE, TPGIT komathidayalan@gmail.com Ph:9626591230	https://www.youtube.com/watch?v=ViiOuJxDFm0&t=3s	
			Respiratory Rate Measurement		https://www.youtube.com/watch?v=IIgGmRLyvCA&t=45s	
			Pulse Rate Measurement		https://www.youtube.com/watch?v=6I0X877Os18&t=10s	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Blood Pressure Measurement.		https://www.youtube.com/watch?v=hUOlGQH7Df0&t=23s	
			Blood Flow & Cardiac Output Measurement.		https://www.youtube.com/watch?v=MonZEwxZ4S0&t=41s	
OMD551 Basics of Biomedical and Instrumentation	TPGIT Vellore	Unit V Bio-Chemical Measurement	Blood Gas Analyzers	Mr. J. VINOTHKUMAR AP/ECE TPGIT Mobile:9629722704 Email:jpvinoth87@gmail.com	https://youtu.be/6mFerdtRp_s	
			Non-Invasive monitoring		https://youtu.be/CXzQTVKL3q4	
			Colorimeter		https://youtu.be/kTKYM5sFeJo	
			Electrolyte Analyzer		https://youtu.be/XYBelExmAvY	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Spectrophotometer		https://youtu.be/qYFF4v4rAdM	
			Blood Cell Counter		https://youtu.be/L2PIH_f94Ck	
			Auto analyzer		https://youtu.be/nc8hHDIbmko	

15. OTL553 TELECOMMUNICATION NETWORK MANAGEMENT - GCE THANJAVUR

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
OTL553 Telecommunication Network Management	GCE Thanjavur	Unit-I Foundations	Foundations	Mr. M. Selvakumar AP/ECE ms.lecturer@gmail.com 9842580032	https://youtu.be/eW4ayylRSas	
			Basics of Networks Management.		https://youtu.be/KK03qLWKFFM	
			Network management standards. open system interconnection standard simple network management protocol internet. telecommunication management network. IEEE standards emerging technologies		https://youtu.be/RwoJaTjaXOM	
			Network management models.		https://youtu.be/xAv6qL6GFf8	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Organization model information model. communication model. *functional model. configuration management. fault management performance management. security management. service level management. accounting management.	Mr. M. Selvakumar AP/ECE ms.lecturer@gmail.com 9842580032	https://youtu.be/HOqnnGNahUc	
OTL553 Telecommunication Network Management	GCE Thanjavur	Unit II Common Management Information Service Element	1) Unit II - Introduction	M.Selvakumar AP/ECE ms.lecturer@gmail.com 9842580032	https://youtu.be/JKkqKiqJXiQ	
			2) Introduction to Common Management Information Service Element. CMISE Model		https://youtu.be/qZA5_-8wlh4	
			3) CMISE Services Definitions		https://youtu.be/mlBOsRfR8Yc	
			4)CMISE Errors	M.Selvakumar AP/ECE ms.lecturer@gmail.com 9842580032	https://youtu.be/PD_PDDZBWUI	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			5)Scoping and *Filtering features *Synchronization *Functional units *Association services		https://youtu.be/EEHDAYnziR8	
			6)Common management information protocol specification.		https://youtu.be/KSrG6B7utAI	
OTL553 Telecommunication Network Management	GCE Thanjavur	Unit-III Information Modelling for TMN	Unit III - Introduction	M. Selvakumar AP/ECE ms.lecturer@gmail.com 9842580032	https://youtu.be/gnUJVJcEVnI	
			2)Rationale for Information Modelling. Management information model		https://youtu.be/2VU9ojrXIb8	
			3)Object oriented modelling paradigm Managed Object class Design	M.Selvakumar AP/ECE ms.lecturer@gmail.com 9842580032	https://youtu.be/uyC86U6bdBE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			4)Structure of management information *Management information base		https://youtu.be/_zGJEF4WtB4	
OTL553 Telecommunication Network Management	GCE Thanjavur	Unit-IV SIMPLE NETWORK MANAGEMENT PROTOCOL	SNMPv1: Managed Networks, SNMP Model Organizational Model, Informational Model, Communicational & Functional Model	S. Kulothungan AP/ECE kulothungann@gmail.com 9842008333	https://youtu.be/7obvXfZk_HQ	
			Major changes in SNMPv2, Structure of management information MIB, SNMPv2 Protocol, Compatibility with SNMPv1	S. Kulothungan AP/ECE kulothungann@gmail.com 9842008333	https://youtu.be/Q0f25f435-E	
			SNMPv3 Architecture, Applications, MIB Security		https://youtu.be/oDnEYSO3lh4	
			4)Remote Monitoring – SMI and MIB, RMON1 and RMON2		https://youtu.be/3GwmCE72yOA	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
OTL553 Telecommunication Network Management	GCE Thanjavur	Unit-V NETWORK MANAGEMENT EXAMPLES	Introductions ATM and its types	G.R. Annushakumar AP/ECE anush765@gmail.com 9894161288	https://youtu.be/QMUAzhmU2BA	
			2) MIB M1 M2 M3 M4 interfaces ATM digital exchange interface management digita1 subscriber loop and asymmetric DSL technologies ADSL configuration management performance management		https://youtu.be/K1So9-a3Uqo	
			3)Network management tools: Network statistics management–network management system management platform case studies: OPENVIEW ALMAP	G.R. Annushakumar AP/ECE anush765@gmail.com 9894161288	https://youtu.be/TPGt4jGllGc	

IV YEAR – VII SEMESTER

PROFESSIONAL CORE COURSES

16. EC8701 ANTENNAS AND MICROWAVE ENGINEERING - GCE TIRUNELVELI

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8701 Antennas and Microwave Engineering	GCE Tirunelveli	UNIT I Introduction to Microwave Systems and Antennas	Introduction and Microwave frequency bands	Prof. G. Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/sGFHuVaBpBI	
			Physical concept of radiation and Antenna Pattern Characteristics		https://youtu.be/NLm8o5GGEcM	
			Beam area, Radiation Intensity Beam Efficiency		https://youtu.be/wuoaj1YGKXw	
			Directivity, antenna Gain, Efficiency, Aperture Efficiency and Effective Area		https://youtu.be/1W3_w_u4wEE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Near- and far-field regions, Fields and Power Radiated by an Antenna	Prof. G. Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/hw3UlQ1BLMs	
			Antenna Noise Temperature and G/T		https://youtu.be/rLyOkDNtlR8	
			Friis transmission equation, Link budget and link margin		https://youtu.be/61VUlXFrcoE	
			Noise Characterization of a microwave receiver		https://youtu.be/1jRdH6yDMow	
EC8701 Antennas and Microwave Engineering	GCE Tirunelveli	UNIT II Radiation Mechanisms and Design Aspects	Radiation Mechanisms of Linear Wire and Loop antennas	G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/maozlHpWx70	
			Loop antenna		https://youtu.be/vJ8dZ0GnnwM	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
				G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/IMo__o07QWM	
					https://youtu.be/foeIXDNjVxM	
			Loop antenna		https://youtu.be/HRQSseDmpFc	
					https://youtu.be/iFtqoGo2pNA	
					https://youtu.be/Jdt-xZ8JhNY	
			Aperture antennas		https://youtu.be/_2tSvK-DEBU	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
				G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/3jMfSofBhI4	
			Aperture antennas		https://youtu.be/WHoTlqP1EwE	
					https://youtu.be/AjuJVu_HI4Q	
			Reflector antennas		https://youtu.be/lBs00NmvNEw	
			Frequency independent antennas		https://youtu.be/GMi-JSSXLaY	
					https://youtu.be/HJUSF7NYTVE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
				G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/8lA6oW5OPdY	
EC8701 Antennas and Microwave Engineering	GCE Tirunelveli	UNIT III Antenna Arrays and Applications	Two-element array, Array factor	G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/epljbi6e8Qw	
			Pattern multiplication		https://youtu.be/-uoBiZ2bQHc	
			Uniformly spaced arrays with uniform and non-uniform excitation amplitudes		https://youtu.be/Rqmn-yiPkcE	
					https://youtu.be/dSaoaDZ1d6s	
					https://youtu.be/RS8o_FYzrts	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Smart antennas		https://youtu.be/hUGnH7Y7TME	
EC8701 Antennas and Microwave Engineering	GCE Tirunelveli	UNIT IV PASSIVE AND ACTIVE MICROWAVE DEVICES	Directional Coupler	G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/FT9UGcVw9AU	
			Power Divider, Magic Tee		https://youtu.be/J-wyJihV5UI	
			Resonator		https://youtu.be/vHPJ05dcjDk	
			Gunn Diodes		https://youtu.be/XlSHd4s5-kw	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			IMPATT diodes		https://youtu.be/4GOB6klU4no	
			Schottky Barrier diodes	G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/WDUnfZgXbeI	
			PIN diodes		https://youtu.be/4aBIS0dNvi8	
			Klystron		https://youtu.be/Baqmuho-FhM	
					https://youtu.be/VWqiKAN5_ds	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
					https://youtu.be/8dxJlkUIjPg	
			TWT	G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/ws4W5NrBy9Y	
			Magnetron		https://youtu.be/iZUE1JAsuWk	
EC8701 Antennas and Microwave Engineering	GCE Tirunelveli	UNIT V MICROWAVE DESIGN PRINCIPLES	Smith Chart basics	G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/tsNFhlhhnIY	
			Impedance Matching		https://youtu.be/RaPT1RYjbII	
			Microwave Filter Design		https://youtu.be/IsdjC-fmdX8	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
					https://youtu.be/fheoyGJQF3w	
				G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/U2GZ0hWan1Q	
					https://youtu.be/hM27BqSxl4Q	
			RF and Microwave Amplifier Design	G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/y-lxitU7fbw	
					https://youtu.be/VWH3hcnyz-0	
			Microwave Power amplifier Design		https://youtu.be/m5FuoJhA6K4	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Low Noise Amplifier Design		https://youtu.be/wG5a2k59QR8	
			Microwave Mixer Design	G.Renisha AP/ECE 9600863216 renisha@gcetly.ac.in	https://youtu.be/ZF3RUxHke1Q	
					https://youtu.be/uDvJufo5KBI	
			Microwave Oscillator Design		https://youtu.be/bpLRLLpHB7o	

17. EC8751 OPTICAL COMMUNICATION - GCE BODINAYAKANUR

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8751 Optical Communication	GCE Bodinayakanur	Unit-I Introduction to Optical Fibers	Introduction – General Optical Fiber Communication System	M Rajamadasamy AP/ECE mraja.nitt@gmail.com Ph: 96776 41988	https://www.youtube.com/playlist?list=PLkzP7eyl-OGGYvdz-VAq3GObez8Av4mdJ	
		Unit-II Transmission Characteristic of Optical Fiber	Transmission Characteristic of Optical Fiber - Attenuation		https://www.youtube.com/watch?v=HzAGJEvAZcc	
			Dispersion in Optical Fibers – Intermodal Delay		https://youtu.be/lvV4UWY44g4	
			Dispersion in Optical Fibers – Intramodal Dispersion		https://www.youtube.com/watch?v=j02Xk5pNa40	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Group Velocity Dispersion, Polarisation Mode Dispersion	M Rajamadasamy AP/ECE mraja.nitt@gmail.com Ph: 96776 41988	https://www.youtube.com/watch?v=oFkrtgyWaKc	
		Unit-III Optical Sources and Detectors	1. Direct and indirect band gaps LEDs quantum efficiency and LED power-light source materials	M Rajamadasamy AP/ECE mraja.nitt@gmail.com Ph: 96776 41988	https://www.youtube.com/watch?v=DWEqnsOvS_g	
			2. LASERS Rate Equations External Quantum efficiency Resonant frequencies Photo Detectors PIN photo detector-Avalanche photo diodes		https://youtu.be/n6ey-VGsXWU	
		Unit- IV Optical Receiver, Measurements and Coupling	Fundamental receiver operation-preamplifiers digital signal transmission error sources Front end amplifiers digital receiver performance probability of error-receiver sensitivity	C. Poornakumari AP (Contract) /ECE Ph: 97515 89297	https://youtu.be/7e3DHAyFVnE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Optical power measurement attenuation measurement dispersion measurement		https://youtu.be/i2PXpq239w8	
			Fiber Numerical Aperture Measurements- Fiber cut- off Wave length Measurements		https://youtu.be/OJKsLVGzfBo	
		Unit- V Optical Communication Systems and Networks	Optic System Design Considerations	Dr. K. Padmapriya AP/ECE priyamoniece@gmail.com Ph: 99946 50860	https://youtu.be/i5VPEak1-qY	
			Link power budget, Rise time budget, DWDM		https://youtu.be/frn8fCeGCfE	
			SONET, SDH, OADM		https://youtu.be/Tcu3dShkgnc	

18. EC8791 EMBEDDED AND REAL TIME SYSTEMS - GCE TIRUNELVELI

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8791 Embedded and Real Time Systems	GCE Tirunelveli	UNIT 1- Introduction to Embedded system Design	Complex systems and micro processors	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1w5VQBeQrLJi84COwtMJXI2jkk4SwF1JZ/view?usp=sharing	
			Embedded system design process		https://drive.google.com/file/d/1PbaEbVnwSHSUYu7A82npHpBrtjGTu_nz/view?usp=sharing	
			Embedded system design process		https://drive.google.com/file/d/1BhROeSdbiHctjK46oUR1bcgo03QJ10ad/view?usp=sharing	
			Design example: Model train controller		https://drive.google.com/file/d/1TDJXU3npoaRd6kDqK41uhr17UpzDak3f/view?usp=sharing\	
			Design methodologies- Design flows – Requirement Analysis – Specifications		https://drive.google.com/file/d/1fWoBGePr7MJuWMV3exobB8BYMpaHmNtJ/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			System analysis and architecture design	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1QV1VoAU8TbG_Ow20om1IPgvWjkk0WntG/view?usp=sharing	
			Quality Assurance techniques		https://drive.google.com/file/d/1sBLIkk3XDU-obD-eMLGOgy4F1gn-4e6g/view?usp=sharing	
			Designing with computing platforms – consumer electronics architecture – platform-level performance analysis.		https://drive.google.com/file/d/17AsfRejxyfxy3X9fqg5-T6QVaOxmFDs3/view?usp=sharing	
EC8791 Embedded and Real Time Systems	GCE Tirunelveli	UNIT II ARM PROCESSOR AND PERIPHERALS	ARM versions	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1IZGH9KVWoOjyI4SZWoGucKMpwBcua_Md/view?usp=sharing	
			ARM architecture		https://drive.google.com/file/d/1VhbGmjafCFt403PnCSnrxl1QlxNr49Lt/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Instruction set		https://drive.google.com/file/d/16tQUmejq0JpEnM-qwP86p0Ud3RHB9tHP/view?usp=sharing	
			Stacks and Subroutines	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1VZItB2_6r5Qol1TalpG2QI4mUADw6yLM/view?usp=sharing	
			LPC214X family Features		https://drive.google.com/file/d/1EOLuvKrbNWOk6NDhF99XHXQoWDUyN6A1/view?usp=sharing	
			UART		https://drive.google.com/file/d/1oFh4bgeDAKn_hqv5MYrXo9B2z6dxE3qC/view?usp=sharing	
			PWM		https://drive.google.com/file/d/1dBnQj7c0-nkzmuy28fyvirdwiakU0kQy/view?usp=sharing	
			Block diagram ARM9		https://drive.google.com/file/d/1vERqxItFKiE2ysBv73AbOJr47d-NoDQV/view?usp=sharing	
			Block Diagram CortexM3		https://drive.google.com/file/d/14Oph-2CeA85ren_X_tz0ApH9TfsLCSlp/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8791 Embedded and Real Time Systems	GCE Tirunelveli	UNIT III EMBEDDED PROGRAMMING	Components for embedded programs	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1rAV02ZNxym4xKGILASXke9jVBUTQRV5V/view?usp=sharing	
			Models of programs	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1K2wMB8_jxoM2LjHrBc-FeBwMLIz6_JQL/view?usp=sharing	
			Assembly, linking and loading		https://drive.google.com/file/d/1CFLQEty9wVp788vGOOcuR2rmcewoUYJA/view?usp=sharing	
			compilation techniques		https://drive.google.com/file/d/1WU3JJvONTPmKoUeUctE1DIENItMHslkJ/view?usp=sharing	
			Program level performance analysis		https://drive.google.com/file/d/1soo0VyXeMEG9yHO-lAzvPZBQSWjxqBv8/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Software performance optimization		https://drive.google.com/file/d/1FrZ7KKkBgO_XmDCzt5-ToFxo2xVFTxDy/view?usp=sharing	
			Program level energy and power analysis and optimization	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1r5zVhVGaQUUYbNLOJ63Ddi9TYim3hmCc/view?usp=sharing	
			Analysis and optimization of program size		https://drive.google.com/file/d/1fob1ZUWoQSISAgTl5ACv7iWTzovA6ndc/view?usp=sharing	
			Program validation and testing		https://drive.google.com/file/d/1B9XldphONpbnOa1MBzqCVhxqesv45spf/view?usp=sharing	
EC8791 Embedded and Real Time Systems	GCE Tirunelveli	UNIT IV REAL TIME SYSTEMS	Structure of a Real Time System	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1aXjXCITPhqH2r8jBqGZPpV74GQFOpMkO/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Estimating program run times		https://drive.google.com/file/d/1W9DNb8VCFJ_RD24H8TPRFGDfAfF5ycmO/view?usp=sharing	
			Task Assignment & Scheduling	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1NYeNVt44OQYs-jAVtzuMtYqU2rODWNsU/view?usp=sharing	
			Reliability & Fault Tolerance Techniques		https://drive.google.com/file/d/1sy5c1k5oSYzjRAhFCLDzYijRgC7zQrTb/view?usp=sharing	
			Clock Synchronisation		https://drive.google.com/file/d/1bNM8KAuwyynBI84M8t26YKDdiv1sJ9dF/view?usp=sharing	
			Logical Clock Synchronisation		https://drive.google.com/file/d/1YNgUgK6RbrR8_tWnY8TbYsGJQbMXGnU2/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8791 Embedded and Real Time Systems	GCE Tirunelveli	UNIT V PROCESSES AND OPERATING SYSTEMS	Introduction – Multiple tasks and multiple processes – Multirate systems	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/1Xx_a3OMqQrAabiobKgO5JFVx_CoxAOgu/view?usp=sharing	
			Pre-emptive real-time operating systems		https://drive.google.com/file/d/1pLOzzLqmuMKnK8Ltoj_2aEtti_CgYO3z/view?usp=sharing	
			Priority based scheduling		https://drive.google.com/file/d/1GyXDQq_K8jlgg4IPzvS5oZ0iH2HFBJpA/view?usp=sharing	
			Inter-process communication mechanisms		https://drive.google.com/file/d/1PueWnkO6HyI_aOBEaSKWjXYi_hm68Kec/view?usp=sharing	
			Evaluating operating system performance, power optimization strategies for processes		https://drive.google.com/file/d/1PueWnkO6HyI_aOBEaSKWjXYi_hm68Kec/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Example Real time operating systems-POSIX-	Dr.S.Baulkani Professor/ECE ramabaulkani@yahoo.co.in 9442813661	https://drive.google.com/file/d/14PZHAC_yH64ktzKTmWJipfioAjgUzM60/view?usp=sharing	
			Windows CE		https://drive.google.com/file/d/1gbAGJVgT_PBi4XL8_323_B-Q93P8bAj-/view?usp=sharing	
			Design Example - Audio player		https://drive.google.com/file/d/1gbAGJVgT_PBi4XL8_323_B-Q93P8bAj-/view?usp=sharing	
			Video accelerator		https://drive.google.com/file/d/1RIu1besFqCOpSwIXFuXpHnRTe1jJuO5E/view?usp=sharing	

19. EC8702 AD HOC AND WIRELESS SENSOR NETWORKS - GCE SRIRANGAM

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8702 Ad hoc and Wireless Sensor Networks	GCE Srirangam	Unit I Ad Hoc Networks – Introduction and Routing Protocols	Elements of Ad-hoc Wireless Networks, Example commercial applications of Ad hoc networking (Part 1)	Mrs.G.Sheeba AP/ ECE sheebag@gces.edu.in 9442017792	https://youtu.be/93m1VZA-0-c	
			Issues in Ad hoc wireless networks (Part 2)		https://youtu.be/vbIf4QDG84A	
			Ad-hoc wireless Internet (Part 3)	Mrs. R. Sarojini / Assistant Professor / ECE/ sarojini.accet@gmail.com/ Ph: 9894604405	https://youtu.be/bXzgERWKgRg	
			Issues in Designing a Routing Protocol for Ad-hoc Wireless Networks, Classifications of Routing Protocols (Part 4)		https://youtu.be/ARFIESnUsPM	
			Table Driven Routing Protocols-Destination Sequenced Distance Vector (DSDV)	Mrs. R. Durga AP ECE/ durgarose@gmail.com/ 7904631571	https://youtu.be/avVp_ltYhnM	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			On–Demand Routing protocols–Ad-hoc On–Demand Distance Vector Routing (AODV		https://youtu.be/5P-OfcCZkx8	
EC8702 Ad hoc and Wireless Sensor Networks	GCE Srirangam	Unit II Sensor Networks-Introduction & Architecture	Challenges for Wireless Sensor Networks & WSN application examples	Mrs.G.Sheeba AP/ ECE sheebag@gces.edu.in 9442017792	https://youtu.be/kYQDx6dsdmY	
			Network Architecture - Sensor Network Scenarios		https://youtu.be/3SJGljIGJYM	
			Enabling Technologies & Single node Architechture-Hardware components	Mrs. R. Sarojini AP / ECE sarojini.accet@gmail.com/ Ph: 9894604405	https://youtu.be/Uj-VdM-XpKI	
			Transceiver Design Consideration	Mrs. R. Durga AP ECE/ durgarose@gmail.com/ 7904631571	https://youtu.be/p67eV194viE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Energy Consumption	Mrs. R. Durga AP ECE/ durgarose@gmail.com 7904631571	https://youtu.be/nDdnkKMgy7c	
			Optimization goals and Figure of merit	Mr. D. Kalaiarasan Assistant Professor / ECE, kalaiarasangct@gmail.com 9629744848	https://youtu.be/VmXOB1StRJA	
EC8702 Ad hoc and Wireless Sensor Networks	GCE Srirangam	Unit III WSN Networking concepts and Protocols	MAC Protocols for Wireless Sensor Networks	Mrs.G.Sheeba AP/ ECE sheebag@gces.edu.in 9442017792	https://youtu.be/TXk9j_MdMWk	
			Low Duty Cycle Protocols and Wakeup Concepts - S-MAC		https://youtu.be/cKdaqsNBmsk	
			The Mediation Device Protocol, Contention based protocols - PAMAS	Mrs. R. Sarojini AP/ ECE sarojini.accet@gmail.com/ Ph: 9894604405	https://youtu.be/e2V4UbnaqkI	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Schedule based protocols – LEACH	Mrs. R. Durga AP ECE/ durgarose@gmail.com 7904631571	https://youtu.be/04vjbbXlavg	
			IEEE 802.15.4 MAC protocol		https://youtu.be/75Aj0bbG9RU	
			Routing Protocols- Energy Efficient Routing, Challenges and Issues in Transport layer protocol	Mr.D. Kalaiarasan AP / ECE, kalaiarasangct@gmail.com , 9629744848	https://youtu.be/CXN8NKK-P-4	
EC8702 Ad hoc and Wireless Sensor Networks	GCE Srirangam	Unit IV SENSOR NETWORK SECURITY	Network Security Requirements, Issues and Challenges in Security Provisioning, Network Security Attacks, Transport, Application Layer, other attacks	Mrs.G.Sheeba AP/ ECE sheebag@gces.edu.in 9442017792	https://youtu.be/z4AbCxCFPCw	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Key Distribution and Management	Mrs. R. Durga AP ECE/ durgarose@gmail.com 7904631571	https://youtu.be/cdLvS39D9IQ	
			Secure Routing – SPINS, reliability requirements in sensor networks	Mrs.G.Sheeba AP/ ECE sheebag@gces.edu.in 9442017792	https://youtu.be/rLBYDTRhxOo	
EC8702 Ad hoc and Wireless Sensor Networks	GCE Srirangam	Unit V SENSOR NETWORK PLATFORMS AND TOOLS	Sensor Node Hardware – Berkeley Motes, Programming Challenges	Mrs.G.Sheeba AP/ ECE sheebag@gces.edu.in 9442017792	https://youtu.be/fwXIeOrcHW0	
			Node-level software platforms – TinyOS, nesC, CONTIKIOS		https://youtu.be/PaY9JseNrfQ	
			Node-level Simulators – NS2 and its extension to sensor networks, COOJA, TOSSIM	Mrs. R. Durga AP ECE/ durgarose@gmail.com 7904631571	https://youtu.be/7OtZHqf55e4	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Programming beyond individual nodes – State centric programming	Mrs.G.Sheeba AP/ ECE sheebag@gces.edu.in 9442017792	https://youtu.be/CtpDWBbj2lY	

PROFESSIONAL ELECTIVES – VII SEMESTER

20. EC8006 MIXED SIGNAL IC DESIGN - GCE DHARMAPURI

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
EC8006 Mixed Signal IC Design	GCE Dharmapuri	Unit-I Submicron CMOS Circuit Design	1.Submicron MOS Characteristics (31.09)	DINESH. G AP/ECE 9788030152 dinaganes@gmail.com	https://youtu.be/J_IiPKXa0vs	
			2.Digital Circuit Design (28.37)		https://youtu.be/Cka4Lf_o1WE	
			3.Circuit Noise –I (25.18)		https://youtu.be/fHdZ2vQZGIA	
			4.Circuit Noise-II (16.03)		https://youtu.be/LHgWkd9tAFs	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			5.Analog Circuit Design (30.13)	DINESH. G AP/ECE 9788030152 dinaganes@gmail.com	https://youtu.be/q_oBoVMtb3w	
			6.CMOS Process Flow (12.51)		https://youtu.be/D4xCA0bfE5Y	
EC8006 Mixed Signal IC Design	GCE Dharmapuri	Unit-2 Integrator based CMOS filters	2.1 Low pass filter, Active RC integrators (23.50)	DINESH. G AP/ECE 9788030152 dinaganes@gmail.com	https://youtu.be/TTB9FCIwLT4	
			2.2 MOSFET-C Integrators, gm-C integrators (16.49)		https://youtu.be/sLHlkJrdPuQ	
			2.3 Discrete time integrators (26.05)		https://youtu.be/HpJkys4JQQs	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			2.4 Bilinear Transfer Function (30.41)		https://youtu.be/EnaAcIdyJCA	
			2.5 Biquad Transfer Function and Noise shaping Filters (34.12)	DINESH. G AP/ECE 9788030152 dinaganes@gmail.com	https://youtu.be/bqRtkcVsB_k	
EC8006 Mixed Signal IC Design	GCE Dharmapuri	Unit-3 Data Converter Architectures	3.1 Resistor string, R-2R ladder Networks (34.47)	DINESH. G AP/ECE 9788030152 dinaganes@gmail.com	https://youtu.be/VMrubtIPcyo	
			3.2 Current Steering, Charge Scaling DACs (32.06)		https://youtu.be/xsq2clegcGw	
			3.3 Cyclic DAC, and Pipeline DAC (16.37)		https://youtu.be/XnH395__ygY	
			3.4 Flash, Two-step flash ADC (35.20)		https://youtu.be/xICEZoS62IY	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			3.5 Pipeline ADC (31.00)		https://youtu.be/iQOXIz4nWiM	
			3.6 Integrating ADC's, Successive Approximation ADC (27.08)		https://youtu.be/STZaLhTVACs	
EC8006 Mixed Signal IC Design	GCE Dharmapuri	Unit-4 Data Converter Modelling and SNR	4.1 Sampling and Aliasing – A modelling approach (39.05)	DINESH. G AP/ECE 9788030152 dinaganes@gmail.com	https://youtu.be/awUlSRuQ9tA	
			4.2 Sample and Hold & Other sampling methods (34.57)		https://youtu.be/aCcUM_SpxHs	
			4.3 Ideal ADC and Quantization Noise (37.52)		https://youtu.be/E-OBhjY5mFY	
			4.4 SNR Improvement using Averaging and Feedback (39.19)		https://youtu.be/E-bJKfks0NE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			4.5a Decimation Filter Design (26.01)		https://youtu.be/Wm_ABdP_j88	
			4.5b Moving Average Filter (33.44)		https://youtu.be/T2U5_wivuB8	
			4.6 Interpolation Filter DAC (33.54)	DINESH. G AP/ECE 9788030152 dinaganes@gmail.com	https://youtu.be/GFYkGwkcYSw	
EC8006 Mixed Signal IC Design	GCE Dharmapuri	Unit -5 Oscillators and PLL	5.1 LC Oscillators (31.45)	DINESH. G AP/ECE 9788030152 dinaganes@gmail.com	https://youtu.be/zHujlPFfq-k	
			5.2 Voltage Controlled Oscillators (25.28)		https://youtu.be/3JblkJa6h8o	
			5.3 Simple PLL Topology (28.44)		https://youtu.be/98HNs9XSo9c	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			5.4 Charge Pump PLL (30.04)		https://youtu.be/Q1qZSG6vAfw	
			5.5 Non-Ideal Effects in PLL and DLL (29.20)		https://youtu.be/ng11xXS21xQ	

21. CS8082 MACHINE LEARNING TECHNIQUES - TPGIT VELLORE

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
CS8082 Machine Learning Techniques	TPGIT Vellore	Unit-I Artificial Neural Networks –	Introduction, Biological motivation, Neural Network Representation, Appropriate Problems	N. Jagadeeswari, Assistant Professor, / CSE, jagadeeswarirajesh1710@gmail.com 9514672196, 9840454629	https://www.youtube.com/watch?v=EnyT-aTH1SE&feature=youtu.be&hd=1	
			Perceptron, Representational Power of Perceptron, Perceptron Training rule, Gradient Descent and the Delta rule		https://www.youtube.com/watch?v=yN3KO5IU0Lc&feature=youtu.be&hd=1	
			Illustrative examples: Face recognition, Advanced topics in ANN		https://www.youtube.com/watch?v=P9c0prDCOww&feature=youtu.be&hd=1	
			Multi-layered networks and Backpropagation algorithm, Remarks of Backpropagation algorithm		https://www.youtube.com/watch?v=dVj7G7DvX9A&feature=youtu.be&hd=1	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
CS8082 Machine Learning Techniques	TPGIT Vellore	Unit-II	Unit II – Introduction, Well posed learning problems, Designing a learning problem	N. Jagadeeswari, Assistant Professor, / CSE, jagadeeswarirajesh1710@gmail.com Mobile: 9514672196, 9840454629	https://www.youtube.com/watch?v=EnyT-aTH1SE&feature=youtu.be&hd=1	
			Concept Learning –task,notation, version spaces		https://www.youtube.com/watch?v=yN3KO5IU0Lc&feature=youtu.be&hd=1	
			Candidate elimination algorithm, remarks, inductive bias		https://www.youtube.com/watch?v=P9c0prDCOww&feature=youtu.be&hd=1	
			Decision tree learning, representation, Appropriate problems		https://youtu.be/7OQRGznUc38	
			Hypothesis space, inductive bias		https://youtu.be/0gTeqJrVnR0	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Issues in decision tree learning		https://www.youtube.com/watch?v=dVj7G7DvX9A&feature=youtu.be&hd=1	
CS8082 Machine Learning Techniques	TPGIT Vellore	Unit-III	Unit 3: Bayes Theorem	Mr.K.Thirunavukkarasu, AP[Adhoc]/CSE, TPGIT, Vellore	https://youtu.be/pA52QDKqH60	
			Unit 3: Concept Learning		https://youtu.be/An_aueOE6Co	
			Unit 3: Hypothesis Space of Concept Learning		https://youtu.be/iQhRjdXv4vQ	
			Unit 3: Maximum Likelihood and Bayes Optimal Classifier		https://youtu.be/xhKp5PVSO8k	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Unit 3: Minimum Description Length Principle and Gibbs Algorithm	Mr.K.Thirunavukkarasu, AP[Adhoc]/CSE, TPGIT, Vellore	https://youtu.be/mEpGNQfCCXw	
			Unit 3: Naïve Bayes Classifier		https://youtu.be/C4xg9k3SQCY	
			Unit 3: Bayesian Belief Network		https://youtu.be/iYGAeu6axsY	
			Unit 3: EM Algorithm		https://youtu.be/z_botqPcTXA	
			Unit 3: Probability Learning		https://youtu.be/fZ9W76AdmK4	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Unit 3: Finite and Infinite Hypothesis Space, Mistake Bound Model	Mr.K.Thirunavukkarasu, AP[Adhoc]/CSE, TPGIT, Vellore	https://youtu.be/PT6RTimBg9w	
CS8082 Machine Learning Techniques	TPGIT Vellore	Unit-IV	Unit 4 – Instance based learning	N.Jagadeeswari, AP/ CSE, jagadeeswarirajesh1710@gmail.com Mobile: 9514672196, 9840454629	https://youtu.be/WFHhDbzWmCY	
			Unit 4 –Locally weighted regression		https://youtu.be/GFDOVt6Mh7A	
			Unit 4 –Radial basis functions		https://youtu.be/wyIwBV8uKGU	
			Unit 4 – Instance based learning	Mr.V.Raghupathy, AP[Adhoc]/CSE, TPGIT, Vellore	https://youtu.be/l6k_eXseBYQ	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
CS8082 Machine Learning Techniques	TPGIT Vellore	Unit-V	Unit 5 : Analytical Learning	N. Jagadeeswari, Assistant Professor, / CSE, jagadeeswarirajesh1710@gmail.com Mobile: 9514672196, 9840454629	https://youtu.be/j86Idol2y-4	
			Unit 5 : Reinforcement Learning		https://youtu.be/wfxsO-lVPf8	
			Unit 5 :Q-Learning		https://youtu.be/nv7u4GAgdXI	
			Unit 5 : Explanation Based Learning		https://youtu.be/ijPLySRxHbs	
			Unit 5 : FOCL Algorithm		https://youtu.be/H9Aj4OE2ch0	

22. CS8086 SOFT COMPUTING - GCE TIRUNELVELI

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
CS8086 SOFT COMPUTING	GCE TIRUNELVELI	Unit-I Introduction to soft computing	Introduction to soft computing	R. ANUSHA PADMAVATHY M.E GCE TIRUNELVELI	https://youtu.be/yDUCVWzZ3AM	
			Artificial neural network		https://youtu.be/ZzvNM_GD6Ns	
			Fuzzy logic		https://youtu.be/YyEHTj1q1HY	
			Genetic algorithm		https://youtu.be/P5ZiFAZrwqE	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
CS8086 SOFT COMPUTING	GCE TIRUNELVELI	Unit-II NEURAL NETWORK	Introduction to neural network	R. ANUSHA PADMAVATHY M.E GCE TIRUNELVELI	https://youtu.be/doWPgTAxBkU	
			Associative memory networks		https://youtu.be/SLn2Xqx523k	
			Unsupervised learning network		https://youtu.be/M3Q9bQedisg	
CS8086 SOFT COMPUTING	GCE TIRUNELVELI	UNIT III FUZZY LOGIC	Membership functions: features, fuzzification, methods of membership value assignments	R. ANUSHA PADMAVATHY M.E GCE TIRUNELVELI	https://youtu.be/lZp767IkLIs	
			Defuzzification: lambda cuts - methods - fuzzy arithmetic and fuzzy measures		https://youtu.be/-DgOFWje7jU	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			extension principle - fuzzy measures - measures of fuzziness -fuzzy integrals - fuzzy rule base and approximate reasoning : truth values and tables,	R. ANUSHA PADMAVATHY M.E GCE TIRUNELVELI	https://youtu.be/V5FPhDQosqg	
			fuzzy reasoning-fuzzy inference systems-overview of fuzzy expert system-fuzzy decision making.		https://youtu.be/wEfp5uU8Tes	
CS8086 SOFT COMPUTING	GCE TIRUNELVELI	UNIT IV GENETIC ALGORITHM	Introduction, biological background, optimization & search technique	R. ANUSHA PADMAVATHY M.E GCE TIRUNELVELI	https://youtu.be/_YLTRdags0g	
			Basic concept, operators, encoding scheme, fitness evaluation		https://youtu.be/dcd7ED_j1mQ	
			Crossover, mutation, genetic programming		https://youtu.be/Ffa4KCfIpA8	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Multilevel optimization, real life problem, advances in GA		https://youtu.be/HtueraqGwm8	
CS8086 SOFT COMPUTING	GCE TIRUNELVELI	UNIT V HYBRID SOFT COMPUTING TECHNIQUES & APPLICATIONS	Neuro-fuzzy hybrid systems - genetic neuro hybrid systems	R. ANUSHA PADMAVATHY M.E GCE TIRUNELVELI	https://youtu.be/NZZkrQTkhLI	
			genetic fuzzy hybrid and fuzzy genetic hybrid systems - simplified fuzzy ARTMAP		https://youtu.be/hJ6J6c5xxWU	
			ANFIS		https://youtu.be/a07FJ1y_FlM	
			Applications: A fusion approach of multispectral images with SAR,		https://youtu.be/wZLVbEQ_yws	

OPEN ELECTIVES – VII SEMESTER

23. OIC751 TRANSDUCER ENGINEERING - GCE BODINAYAKANUR

S. No.	Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
	OIC751 Transducer Engineering	GCE Bodinayakanur	Unit-I Science of Measurements and Classification of Transducers	Units and Standards	A Selvin Charles selvincharles7@gmail.com Ph: 78100 85199	https://www.youtube.com/watch?v=3B3fE-ClJ5c&t=892s	
				Calibration methods		https://www.youtube.com/watch?v=NefhW9Fs-LI	
	OIC751 Transducer Engineering	GCE Bodinayakanur	Unit-II CHARACTERISTICS OF TRANSDUCERS	Part 1: Static characteristics: – Accuracy, precision, resolution, sensitivity,		https://www.youtube.com/watch?v=WudWiSs1eRs	
				Part 2: linearity, span and range -Dynamic characteristics: – Mathematical model of transducer		https://www.youtube.com/watch?v=6wuR_zxGTUQ	

S. No.	Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
				Part 3: Response to impulse, step, ramp and sinusoidal inputs.		https://www.youtube.com/watch?v=C5Fi2jz6Xms&t=960s	
	OIC751 Transducer Engineering	GCE Bodinayakanur	Unit-III VARIABLE RESISTANCE TRANSDUCERS	Principle of operation, construction details, characteristics and applications of potentiometer,	A Selvin Charles selvincharles7@gmail.com Ph: 78100 85199	https://www.youtube.com/watch?v=7J1lf7wYlMg	
				strain gauge, resistance thermometer, Thermistor,		https://www.youtube.com/watch?v=Wq0uF1GHtGg	
				hot-wire anemometer,		https://www.youtube.com/watch?v=AUQKi60Ub-s&t=1s	
				piezoresistive sensor and humidity sensor		https://www.youtube.com/watch?v=JafsL56bQMk&t=11s	

S. No.	Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
	OIC751 Transducer Engineering	GCE Bodinayakanur	Unit-IV	Induction potentiometer	A Selvin Charles selvincharles7@gmail.com Ph: 78100 85199	https://www.youtube.com/watch?v=AcyOQSzQETk	
				Variable reluctance transducers EI pick up		https://www.youtube.com/watch?v=02X5CzvqbWc	
				Principle of operation, construction details, characteristics and applications of LVDT		https://www.youtube.com/watch?v=tssMQH4jC8g	
				Capacitive transducer and types		https://www.youtube.com/watch?v=3y30AtXdX40	
				Capacitor microphone		https://www.youtube.com/watch?v=Af1-C-xm7X	

S. No.	Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
				Frequency response		https://www.youtube.com/watch?v=OQUfyZPV-HA	
	OIC751 Transducer Engineering	GCE Bodinayakanur	Unit-V	Piezoelectric transducer - Hall Effect transducer – Magneto elastic sensor- Digital transducers MEMS Nano Sensors	A Selvin Charles selvincharles7@gmail.com Ph: 78100 85199	https://www.youtube.com/watch?v=XASI1c_2m1g	

24. OCS751 DATA STRUCTURES AND ALGORITHMS - GCE TIRUNELVELI

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
OCS751 Data Structures and Algorithms	GCE Tirunelveli	Unit-I Algorithm Analysis, List ADT	Algorithms: Notation - analysis – running time calculations	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/1sjaALf4h_G6PodS0eLI8ImS70FLDv0KP/view?usp=sharing	
			Abstract Data Types (ADTs): List ADT – Array-based implementation – linked list implementation		https://drive.google.com/file/d/1kiDolERFltwMmuVS2NUkIliGoTjRpi/view?usp=sharing	
			Singly linked lists		https://drive.google.com/file/d/17QK0rcXS9fhX0vwNg6d8iODXbfcgqYpu/view?usp=sharing	
			Applications of lists: Polynomial Manipulation		https://drive.google.com/file/d/1Hf5JKJwa5YA1ZWowNmUs7ZKNgCOnqtQ/view?usp=sharing	
			Implementation of List ADT using an array in C.	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/1uWSX8vYbMFlUKpGyTmf681aB22noh7Af/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
OCS751 Data Structures and Algorithms	GCE Tirunelveli	Unit-II STACKS AND QUEUES	Algorithms: Notation - analysis – running time calculations	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/1sjaALf4h_G6PodS0eLI8ImS70FLDv0KP/view?usp=sharing	
			Abstract Data Types (ADTs): List ADT – Array-based implementation – linked list implementation		https://drive.google.com/file/d/1kiD-molERFltwMmuVS2NUklliGoTjRpi/view?usp=sharing	
			Singly linked lists		https://drive.google.com/file/d/17QK0rcXS9fhX0vwNg6d8iODXbfcgqYpu/view?usp=sharing	
			Applications of lists: Polynomial Manipulation		https://drive.google.com/file/d/1Hf5JKJwa5YA1ZWowNmUs7Z-KNgCOnqtQ/view?usp=sharing	
			Implementation of List ADT using an array in C.		https://drive.google.com/file/d/1uWSX8vYbMFlUKpGyTmf681aB22noh7Af/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
OCS751 Data Structures And Algorithms	GCE Tirunelveli	UNIT III- SEARCHING AND SORTING ALGORITHMS	Divide and Conquer methodology- Searching: Linear Search	Prof. SHIBIA MALAR S GCE Tirunelveli	https://drive.google.com/file/d/1ufS3SsizcVG1zIFlRoWqKRlZEurRfwXX/view?usp=sharing	
			Binary search		https://drive.google.com/file/d/1iQo0qayZUAC0vBG7DqiIID3ptfYeMGlH/view?usp=sharing	
			Sorting: Insertion Sort Implementation	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/1bHTiKlN_PCDsF3LY74Cp57VR7V_wKUfV/view?usp=sharing	
			Insertion Sort Analysis		https://drive.google.com/file/d/1LYyRJv1cpMa3T2h6RP6Mo3pwguLFa4cZ/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Merge Sort Implementation and it's Analysis	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/14GpGF9XE27oEYB_V7CWcLgHzPnpKlEF/view?usp=sharing	
			Quick Sort Implementation and it's Analysis		https://drive.google.com/file/d/1B1yjRdlOutCWSn7CiWionjWiIvhxDgo/view?usp=sharing	
			Heap Sort		https://drive.google.com/file/d/15SMiGy5iyS0DjYi6OQ23vUcLJcrhZY4B/view?usp=sharing	
OCS751 Data Structures And Algorithms	GCE Tirunelveli	UNIT IV TREES	Tree ADT –Tree Traversals-Binary Tree ADT —– Applications of Trees	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/1IA8c1WmYWKDbb845VFieMm4YiAaBE8cM/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Expression Trees – Binary Search ADT - Implementations of Binary Search and its operations – applications of Heap – tree traversal methods	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/1VoarFEcedSoTytPsVLmFc5Vgv3vqEpPb/view?usp=sharing	
			Heap		https://drive.google.com/file/d/15SMiGy5iyS0DjYi6OQ23vUcLJcrhZY4B/view?usp=sharing	
			finding height of the tree using C – Implementation of heap and heap sorting using arrays in C		https://drive.google.com/file/d/1-HsyhHfKUMOexk-6ubErUhm0byUH9_wu/view?usp=sharing	
OCS751 Data Structures and Algorithms	GCE Tirunelveli	UNIT V GRAPHS	Definition – Representation of Graph – Breadth-First Traversal – Depth-First Traversal	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/1UPUSQnnn65iYf5oMUHdJA9PmhJZmApv6/view?usp=sharing	
			– Dynamic Programming Technique – Warshal's and Floyd's Algorithm –-		https://drive.google.com/file/d/1hGgz7GPr1OrxpbvT8yRJu26D5AE-Cfo3/view?usp=sharing	

Subject Code and Name	College Name	E-Lecture Unit	Sub Topics	Name of Faculty / Designation, Email & Mobile No	YouTube Link	QR code
			Greedy method – Dijikstra's Algorithm – Applications of Graphs	Prof. Shibia Malar S GCE Tirunelveli	https://drive.google.com/file/d/1uDR03PFZxbZ3koCnbbpRf0aed6jMreR-/view?usp=sharing	
			Implementations of Graphs – Graph Traversal Methods – Finding shortest path using Dijikstra's Algorithm in C		https://drive.google.com/file/d/1EyHese4HOQXwQLaqUKNR3BeVWlmazk_J/view?usp=sharing	