

No.196/Stat./Acad/2022

Dated: March 2, 2022

To The Principal, University College of Engineering, Osmania University.

Sub:- Osmania University: Revised Almanac of M.E./M.Tech. I Semester, B.E. III, V & VII Semester Semesters & M.E. (All Branches) III Semester, B.E. I Semester for the AY 2021-2022 -Approval – Communicated – Reg.

Ref:- Your Letter No. 297/DFE/2021/M.E/almanac dated: January 27, 2022.

Sir/Madam,

I am desired to communicate the approval of the University for the following M.E./M.Tech. I Semester, B.E. III, V & VII Semester Semesters & M.E. (All Branches) III Semester, B.E. I Semester for the academic year 2021-2022:

1	Commencement of Classes (Offline mode)	22.11.2021		
2	CIE (internal Test)-1	27.12.2021 to 29.12.2021		
3	Display of CIE-1 Marks	03.01.2022		
4	CIE (internal Test)-2	01.02.2022 to 05.02.2022		
5	Last Date of Instruction	19.02.2022		
6	Display of Total Sessional Marks	23.02.2022		
7	Submission of Attendance to OU Exam Branch	22.02.2022		
8	Submission of Sessional Marks to OU Exam Branch	26.02.2022		
9	Commencement of Theory Examinations(SEE)	28.02.2022		

1	Commencement of Classes (Offline mode)	08.11.2021
2	CIE (internal Test)-1	13.12.2021 to 16.12.2021
3	Display of CIE-1 Marks	27.12.2021
4	CIE (internal Test)-2	01.02.2022 to 05.02.2022
5	Last Date of Instruction	05.02.2022
6	Display of Total Sessional Marks	08.02.2022
7	Submission of Attendance to OU Exam Branch	07.02.2022
8	Submission of Sessional Marks to OU Exam Branch	10.02.2022
9	Commencement of Theory Examinations(SEE)	13.02.2022
10	SEE practical examinations after the completion of theory SEE	

B.E	. I Semester	
1	Induction Programme (2 Weeks)	29.11.2021 to 10.12.2021
2	Commencement of Classes (Offline mode)	13.12.2021
3	CIE (internal Test)-1	01.02.2022 to 05.02.2022
4	Display of CIE-1 Marks	14.02.2022
5	CIE (internal Test)-2	03.03.2022 to 05.03.2022
6	Last Date of Instruction	11.03.2022
7	Display of Total Sessional Marks	16.03.2022
8	Submission of Attendance to OU Exam Branch	15.03.2022
9	Submission of Sessional Marks to OU Exam Branch	21.03.2022
10	Commencement of Theory Examinations(SEE)	28.03.2022
11	Practical Examination	After the completion of theory SEE

This is for your information

Yours Sincerely,

DEPUTY REGISTRAR
(Academic)



METHODIST

COLLEGE OF ENGINEERING & TECHNOLOGY
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Academic Calendar for I SEM of A.Y-2021-22

S. No	Date	Day	Event
1.	08-11-2021	Monday	Commencement of Class Work
2.	19-11-2021	Friday	Guru Nanak Jayanthi
3.	22/11/2021	Monday	Completion of Unit 1
4.	03/12/2021	Friday	Comp2letion of Unit 2
5.	First Week of December	Any Working Day	Seminar on Career Guidance
6.	13-12-2021 to 16-12-2021	Monday to Thursday	Continuous Internal Evaluation - I (CIE)
7.	Forth Week of December	Any Working Day	Awareness Session about UPSC exam
8.	22/12/2021	Wednesday	Completion of Unit 3
9.	25-12-2021	Saturday	Christmas
10. 26-12-2021		Sunday	Boxing Day
11.	Last Week of December	Any Working Day	Interaction Session with Alumni Students
12.	01-01-2022 Saturd		New year
13.	05/01/2022	Wednesday	Completion of Unit 4
14.	12-01-2022 to 15-02-2022	Wednesday to Saturday	Pongal Holidays
15.	25/01/2022	Tuesday	Completion of Unit 5
16.	26/01/2022	Wednesday	Republic Day
17.	02-02-2022 to 05-02-2022	Wednesday to Saturday	Continuous Internal Evaluation - II (CIE)
18.	05-02-2022	Saturday	Last date of Instruction
19.	10-02-2022	Tuesday	Display of Sessional Marks on or Before
20.	14-02-2022	Monday	Commencement of Theory Examinations
21.	14-03-2022	Monday	Commencement of II SEM Class Work

Methodist Color of Engg & Tech King Koti, Hyderabad-500 001 CSE, AI&DS Programmes 2021-2022 Faculty Subject Preference Form(I Sem, III Sem, V Sem, VII Sem)

Dear All

Greetings

All the faculties are hereby informed to fill the odd semester subject preference form ASAP

The curriculum followed for various semesters are as follows:

I Sem - CSE, AI & DS -Autonomous

III Sem - CSE, AI & DS - AICTE(New) V sem & VIII Sem - CSE - AICTE

Regards Dr P Lavanya HOD-CSE

hodcse@methodist.edu.in Switch accounts

*Required

Email *

Your email address

Abids, Hyderaba

Your answer
Phone no *
Your answer ·
Willing to continue next Semester *
O Yes O No
Total Experience *
Your answer
Experience in Methodist *
Your answer
Subjects taught Previously *
Your answer

Department of CSE

Option	- II *
☐ Da	ta structures and Algorithms(Theory + Lab)
Dis	crete Mathematics(Theory)
00	P using JAVA(Theory + Lab)
Ad	v.Computer Skills(Lab)
0 1:	
Option	- III *
So	ftware Engineering(Theory+Lab)
☐ Op	erting Systems(Theory+Lab)
Au	tomata Language &Computation(Theory)
Option	- IV *
	ormation Security(Theory)
	tascience Using R(Theory+Lab)
_ Dis	tributed Systems(Theory+Lab)
Profess	sion Elective - I *
O Art	ificial Intelligence
O Ad	vanced Computer Architecture
	age Processing
	tread of a l

Programming for Problem Solving(Theory + Lab)

Methodist Call

Profession Elective-II *
O Web Technologies
C Embedded Systems
O Graph Theory
O Data Analytics
Profession Elective - III *
O Block Chain Technologies
O Information Retrieval Systems
O Soft Computing
O Computer Graphics
Open Elective-I
O Data Science and Data Analytics
O Cyber Security
Research Area / Project Domain *
Research Area / Project Domain *
Research Area / Project Domain * Your answer
Your answer

Methodist College Hyde agan.

CISCO Courses	
O Python	
О ют	
CCNA Module 1 + Module 2	
O Cyber Security	
O Linux	

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Google Forms

Department of CSE
Methodist College : Fugg & Tel
Abids, Hyderabad.



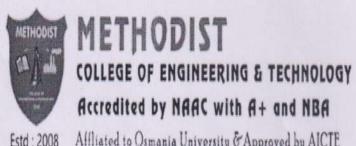
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		-	Subjects taught	021-2022 Summary o			Option - IV	Profession Elective	Profession Elective-	Profession Elective -	Open Elective-I
Email address	Name	Phone no	Previously	Option - 1 Programming for	Option - II	Option - III	Option - IV	-	"		Open Liceure-
avanya.post@gmail.com	Dr.Lavanya Pamulaparty	8985042735	OS,ML,PPS, Java,DS,ALC, IRS	Problem Solving(Theory + Lab)	OOP using JAVA(Theory + Lab)	Operting Systems(Theory+Lab)	Datascience Using R(Theory+Lab)	Artificial Intelligence	Data Analytics	Information Retrieval Systems	Data Science and Data Analytics
oravinthumukunta@gmail.com	T PRAVEEN KUMAR	9885456186	DS, DM, JAVA, DAA, DBMS, PPS, AI	Programming for Problem Solving(Theory + Lab)	Data structures and Algorithms(Theory +	Operting Systems(Theory+Lab)	Datascience Using	Artificial Intelligence	Data Analytics	Information Retrieval Systems	Data Science and Data Analytics
sd.sandeep@gmail.com	Er Sandeep Ravikanti	8074330471			Adv.Computer Skills(Lab)	Software Engineering(Theory+ Lab)	Information Security(Theory)	Advanced Computer Architecture	Web Technologies	Block Chain Technologies	Cyber Security
malekaanjum786@gmail.com	Maleka Anjum	636294110	Nill		Data structures and Algorithms(Theory + Lab)	Operting Systems(Theory+Lab)	Information Security(Theory)	Artificial Intelligence	Web Technologies	Block Chain Technologies	
mkrishnamurty@gmail.com	M Krishnamurty	9441427954	AI, SE, ML, CC		Adv.Computer Skills(Lab)	Software Engineering(Theory+ Lab)	Information Security(Theory)	Artificial Intelligence	Data Analytics	Soft Computing	
aruna0949@gmail.com	Aruna Mailavaram	+917093863977	Data Analytics, 1 oT		Adv.Computer Skills(Lab)	Software Engineering(Theory+ Lab)	Datascience Using R(Theory+Lab)	Advanced Computer Architecture	Data Analytics	Information Retrieval Systems	Data Science and Data Analytics
Shaziyajabeen@gmail.com	Shaziya jabeen	+919640076786	Os.daa. Cn. c++.		Data structures and Algorithms(Theory + Lab)	Operting Systems(Theory+Lab)	Information Security(Theory)	Advanced Computer Architecture	Web Technologies	Information Retrieval Systems	Cyber Security
vasavibvs@gmail.com	VASAVI SRAVANTHI BALUSA	08500088390	DBMS, R Programming, Web Technologies, Linux Programming, Cloud computing, c, Java		Adv.Computer Skills(Lab)	Automata Language &Computation(Theory		Artificial Intelligence	Web Technologies	Block Chain Technologies	
deepthijayam@gmail.com	Deepthi Joshi	8019485585	Software Engineering		Adv.Computer Skills(Lab)	Software Engineering(Theory+ Lab)	Information Security(Theory)	Artificial Intelligence	Data Analytics	Soft Computing	
			CO, DCCN, Cryptography of Computer Networks,		OOP using	Software Engineering(Theory+	Information Security(Theory)	Artificial Intelligence	Web Technologies	Block Chain Technologies	Cyber Security
shruthi.sk2011@gmail.com	J.SOWMYA Dr.Shruthi SK	9133402803	Cloud computing Mobile Application Development, PPS, So ftware Testing Methodology, DBMS, Cland Data structures, OOPs		JAVA(Theory + Lab) OOP using JAVA(Theory + Lab)	Operting Systems(Theory+Lab)	Information	Artificial Intelligence	Data Analytics	Information Retrieval Systems	Cyber Security
saritha760@gmail.com	G.Saritha	7893221209	Information security,computer networks, distributed systems, operating systems, software engineering, artificial intelligence.		Data structures and Algorithms(Theory + Lab)	Software Engineering(Theory+ Lab)	Information Security(Theory)	Artificial Intelligence	Data Analytics	Soft Computing	Cyber Security
sanuar oo@gman.com	O.Ouriera	7000221200		Programming for						Information Retrieval	Data Science an
adeprajesh@gmail.com	ADEPU RAJESH	9177996499	PPS (Programming for Problem Solving) CN, ALC,PPS,DISCRETE	Problem Solving(Theory + Lab)	OOP using JAVA(Theory + Lab)	Operting Systems(Theory+Lab)	Information Security(Theory)	Artificial Intelligence	Data Analytics	Systems	Data Analytics
unnati.khanapurkar@gmail.com	UNNATI KHANAPURKAR	09652683857	MATHS, CO, COMPILER CONSTRUCTION, CG, EMBEDDED SYSTEM, NETWORK SECURITY, OOPS USING JAVA, LST		OOP using JAVA(Theory + Lab)	Automata Language &Computation(Theory	Information Security(Theory)	Artificial Intelligence	Graph Theory	Computer Graphics	Cyber Security

frvuppu@gmail.com	Dr Vuppu Padmakar		structure pps pl DBMS Design & Analysis of Algorithms, Discrete Mathematics, Compiler Construction &		Discrete Mathematics(Theory)	Software Engineering(Theory+	Information Security(Theory)	Advanced Computer	Embedded Systems	Information Retrieval Systems	Daid Analytics
	S V HEMANTH	8087901888		Programming for Problem Solving(Theory + Lab)	OOP using JAVA(Theory + Lab)	Engineering(Theory+ Lab), Operting Systems(Theory+Lab)	Information Security(Theory), Datascience Using R(Theory+Lab)	Image Processing	Data Analytics	Soft Computing	Data Science and Data Analytics
pvrcseit@gmail.com	P V RAMANAIAH	9010201236	USING JAVA,DS,DBMS,DAA ,ALC,PYTHON,		Adv.Computer Skills(Lab)	Automata Language			Data Analytics	Soft Computing	
sharada.mangipudi07@gmail.com	Dr. M Sharada	9912106100	PPS,DBMS,CN,MC,D M C,CPP,PL,OOP	Programming for Problem Solving(Theory + Lab)	OOP using JAVA(Theory + Lab)		Information Security(Theory), Datascience Using	Artificial Intelligence	Data Analytics	Block Chain Technologies	Data Analytics
rajshekardeva@gmail.com	Rajashekar D	09491827322	science, sqat, cn, oosd, dc, dbms, wt, cpps,		Adv.Computer Skills(Lab)	Software Engineering(Theory+	Datascience Using R(Theory+Lab)	Artificial Intelligence	Data Analytics	Information Retrieval	Cyber Security Data Science and
sowjanyayk6data@gmail.com	Mrs B Sowjanya	9948125333	CN.PPS.OOP USING JAVA.OS, LST,IRS,WEB TECHNOLOGY, ML, irs, dm, data		OOP using JAVA(Theory + Lab)	Operting Systems(Theory+Lab	Information Security(Theory)	Artificial Intelligence	Web Technologies	Computer Graphics	C. L. C

Methodist College Frigg & Tech Abids, Hyderabad.





Estd: 2008

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Department of Computer Science and Engineering

Date:-04-10-2021

Circular

All the faculties are hereby informed there will be a all staff meeting 05-10-2021 in R&D lab from 2:30PM to 3:30PM. I request everyone to attend it without fail. The following is the agenda of the meeting.

Agenda:

- 1. Subject Allocation
- Coordinators Allocation
- 3. Value added Courses Discussion
- 4. Lab-Incharge allocation
- 5. Non-Teaching Lab staff Subject Allocation
- 6. Any other discussion with the permission of the undersigned

1). Umoti X outroles

Department of Wethodist College - Figg & Tech Abids, Hydershad.

2) Senday & Showither 4/10/2017 4) Cq. Savitha Set 4/10/21

5) Dr. Syed Azahad 4/10/21

Defortment meeting

A defautment herel meeting was held to discus subject and for next remester [odd remoter 21-22] at 2:30 PM. in R&D dato [E block-lab VI]

Members. 1. Dr. P Lenrarya -. 2. Dr. M. Shalada. 3. B. Vasavi Srovanth - 85/10/21 4. Shaziya Jabeen -5. Maleka Anjum - Alekgidel - @ 105/10/20y 6. ADEPU RAJESH estant ostout 2021 7. S. Sunil Kumar -8. G. Mahandhan g. M. Knishoamnaty -10. Dr. V. Padugkal -11 Mr. A. Rajesh -2. Sendarin -Nos who stold 13. T. Pormer Kions Shethe Stotes 14. P.v. Ramanaide -15. Dr. Shuthi Sk James 05/10/2021 To Sarrya (Slot) 17. Deepthi Joshi -19. Aruna -Umati K -Browjaya B Sowjanya -20.

П	
	Agenda of the meeting
	1. Subject allocation for Odd Semester for A. Y 2021-22 for CSE and AILDS branches.
	Description Description Description
Table .	S Value Added Courses Discussion (a) Assessment Committee will be giving the Submission deadline (b) Mentany cell.
	De Lab- Inhange Allocation De Non- reachige Lab Staff Subject Allocation Any other discussion with the Permission of the Undersigned.
	Hop madam Asked to do Certification for Shidert & fault. Under Value added Courses like Spoken Sutorial and CISCI
100	(2) CCNA module It 2 Should be Started and in II nd years and Dernet Program in III and Year
	(3) Lab Programments Were ausigned with Lab Subject (a) Coordinator Were Motivated and Arrighed author (b) Coordinator Were Motivated and Arrighed author (c) Coordinator Were Motivated and Arrighed author (ine Pable) Mr. T Proveeg Kumar (T. Sowmya.
	S) Course files of 2021-2022. Academic Year Should be Submitted to criteria II.
	@ FloD Madam Asked to Use. ICT tools for Fearing.

Mentoring with Shadats and were discussed of Some parts
were Highlighted.
() Communication With Parents (Shadats).



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DATE:08-11-2021

	CSES	STAFF WORKLOAD (2021-22	ODD SEM	IESTER)		
S. No	Faculty name	Subjects	Work load	Coordinators/ In charges		
1.	Dr. P. Lavanya Prof. & HOD	r. P. Lavanya rof. & HOD DSRVII SEM-A-5 DSR LAB-VII SEM A-6		&. HOD		
2. Dr M Sharadha varalakshmi Professor 3. Dr. V. Padmakar Asoc. Prof. 4. Mr A Rajesh Asoc. Prof.		OS-B: 5 OS LAB: 4 PPS: 4	13	1.Finance 2.Grievances Cell Coordinator 3.IQAC 4. Mentor		
		DM-A: 5 DIS-B: 5 DIS LAB- 8	18	1. Mentor.		
		DIS-A:5 ALC-B:5 DIS LAB:8	18	Exam Branch Mentor		
5.	Mr. T. Praveen Kumar Asst. Prof	DSRVII SEM-B-5 DSR LAB-VII SEM B-6 PW-A: 2 PW-B: 3	16	 Digital learning Platform Mentor. Professional Society 		
6.	Mr. D. Raja Shekar Asst. Prof.	JAVA-4 BC/IRS-4 JAVA LAB-4 ACS LAB-4	16	Department Assessments Committee Member. Mentor.		
7.	Er. Sandeep R Asst. Prof.	SE-A:5 SE LAB: 4 DSA LAB: 4 MP: 4	17	 Member of Website . Coordinator of Alumni Cell Mentor. Professional Society 		
8.	Mr. Uday Kumar Asst. Prof.	PPS LAB(CSE) - 8 PPS LAB(AI & DS) - 8	16	1. Mentor		



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

				DATE:08-11-2021
9.	Mrs. B. Sowjanya Asst. Prof.	JAVA-5 JAVA LAB-4 JAVA LAB(AI&DS)-4 MP-4	17	 Coordinator of Library Cell. Member of Student Welfare Cell. Cultural Activities. Mentor. Department Assessments Committee Member
10.	Mr. P.V. Ramanaiah Asst. Prof.	DSA: 4 DSA LAB-4 PW: 10	18	1. Time Table 2. Mentor
11.	Mrs. G.Saritha Asst. Prof.	DSA-B: 5 AI-B: 4 DSA LAB: 8	17	1.Electrical&Network cell 2. Mentor
12.	Mrs. Unnati K. Asst. Prof.	JAVA-B: 5 JAVA LAB-8 DM-4	17	5. Professional Society6. Labs3. Mentor.4. CISCO
13.	Mr. Krishnamurthy Asst. Prof	ACS LAB-4 DA-4 MP-8	16	Member of Student Counseling & Mentoring Cell. IEDC Mentor.
14.	Mrs C. Sravanthi Asst. Prof.	JAVA LAB-8 DSR LAB-VII SEM B-12	20	1. Mentor.
15.	Mrs J.Sowmya Asst. Prof	DM-4 DSR-6 PPS-4 PPS LAB- 4	18	2. Mentor 2. Time Table
16.	Dr S K Shruthi Asst. Prof	IS-10 JAVA LAB-4 CISCO-2	16	Placement Coordinator(TPO) Press
17.	Mrs Deepthi joshi Asst. Prof.	SE-5 AI-5 SE LAB-4	14	1.Admission cell
18.	Mrs Vasavi Sravanthi Asst. Prof.	ALC-4 SE LAB-4 PPS-4 PPS LAB- 4	16	1.Exam Branch



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DATE:08-11-2021

				DATE:00-11-2021
19.	Ms.Mariya Anjum Asst. Prof	BC-4 ACS LAB-8	12	1. Mentor.
20.	Mrs Shaziya Jabeena Asst. Prof.	DSA-5 DM-B:5 DSA LAB-8	18	1.Professional Society - CST,
21.	Ms. A. Lalitha Asst. Prof.	ACS LAB-8 DSA LAB-4 SE LAB-8	20	1. Mentor.
22.	Dr. Syed Azahad	OS-A-5 CS-OE2-4 OS LAB-8	17	Electrical&Network cell
23.	Mr. Shaik Rasool	WT-4 SE LAB-4 PPS-4 PPS LAB- 4	16	Placement Coordinator(TPO)

riead o Departme Methodist College : Frigg Abids, Hyderabad.



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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Faculty Individual Time Table

Faculty Name: Dr. Shruthi(16)

A.Y: 2021 - 2022

Semester: VII

W. E. F. 08 - 11-2021

Period/	1	1 2	11:30 – 12:30	12:30 -	4	5	6	7
Day	9:30 - 10:30	10:30 - 11:30		01:15	01:15 - 02:15	02:15 - 03:15	03:15 - 04:15	04:15 - 05:00
Monday			IS-B		IS-A	IS-A		02.00
Tuesday	IS-B	IS-B			IS-A			
Wednesda y				LUNCH	IS-B	JAV	A-B2	
Thursday	IS-A			BREAK		CIS	CO	
Friday		JAVA	-B1				IS-B	
Saturday	IS-A							

S. NO	COURSE CODE	COURSE NAME	CLASS	Additional Responsibilities
1	PC 701 CS	IS – Information Security	VII Semester BE CSE – A,B	1. Placement Coopdinator

Facultypt. of Computer Science
Viethodist College of Engg. & Torte

ting Keti, Hydershad.

Head of Department

2 - Pren

Methodist College & Fugg & Tech Abids, Hyderabae.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE DESCRIPTION FILE

Academic Year & Semester	2021-2022	
Course Code	PC 701 CS	
Course Title	INFORMATION SECURITY	
Curriculum Regulation	AICTE	
Semester	VII	
Course Instructor Dr. Shruthi SK, Assistant Professor, CSE Department		

I. PREREQUISITE(S):

Level	Credits	Semester	Prerequisites
UG	3	7	441

II. SCHEME OF INSTRUCTIONS

Lectures	Tutorials	Practicals	Credits
3	-	-	3

III. SCHEME OF EVALUATION & GRADING

S. No	Component	Duration	Maximum Marks
	Continuous Internal Evaluation (CIE)		
1.	Internal Examination – I	60 minutes	20
2.	Internal Examination - II	60 minutes	20
	Average of the two internal exams		20
3.	Assignments	5	5
4.	Quizzes	į.	5
	CIE (Total)		30
5.	Semester End Examination (University Examination)	3 hours	70
		TOTAL	100

Marks Range	85-100	70 to < 85	60 to < 70	55 to < 60	50 to < 55	40 to < 50	< 40	Absent
Grade	S	Α	В	С	D	Е	F	Ab
Grade Point	10	9	8	7	6	5	0	

Course Code	de Course Title						Core / Elective
PC 701 CS		Core					
Danasaniaika	C	ontact Hou	ırs per Wee	ek	CIE	SEE	Credits
Prerequisite	L	Т	D	P	CIE		
140	3	1	-	14.	30	70	3

Course Objectives

- > To learn legal and technical issues in building secure information systems
- To provide an understanding of networksecurity
- > To expose the students to security standards and practices

Course Outcomes

After completing this course, the student will be able to

- 1. Describe the steps in Security Systems development life cycle(SecSDLC)
- 2. Understand the common threats and attack to information systems
- 3. Understand the legal and ethical issues of information technology
- 4. Identify security needs using risk management and choose the appropriate risk control strategy based on businessneeds
- 5. Use the basic knowledge of security frameworks in preparing security blue print for theorganization
- 6. Usage of reactive solutions, network perimeter solution tools such as firewalls, host solutions such as antivirus software and Intrusion Detection techniques and knowledge of ethical hackingtools
- 7. Use ethical hacking tools to study attack patterns and cryptography and secure communication protocols
- 8. Understandthetechnicalandnon-technicalaspectsofsecurityprojectimplementationand accreditation

UNIT-I

Introduction: History, Critical Characteristics of Information, NSTISSC Security Model, Components of an Information System, Securing the Components, Balancing Security and Access, The SDLC, The Security SDLC.

Need for Security: Business Needs, Threats, Attacks, and Secure Software Development

UNIT-II

Legal, Ethical and Professional Issues: Law and ethics in Information Security, Relevant U.S. Laws, International Laws and Legal Bodies, Ethics and Information Security.

Risk Management: Overview, Risk Identification, Risk Assessment, Risk Control Strategies, selecting a Risk Control Strategy, Quantitative versus Qualitative Risk Control Practices, Risk Management Discussion Points, Recommended Risk Control Practices.

UNIT-III

Planning for Security: Security policy, Standards and Practices, Security Blue Print, Security Education, Continuity strategies.

Security Technology: Firewalls and VPNs: Physical Design, Firewalls, Protecting Remote connections.

UNIT-IV

Security Technology: Intrusion Detection, Access Control, and other Security Tools: Intrusion Detection and Prevention Systems-Scanning, and Analysis Tools- Access Control Devices.

Cryptography: Foundations of Cryptology, Cipher methods, Cryptographic Algorithms, Cryptographic Tools, Protocols for Secure Communications, Attacks on Cryptosystems

UNIT-V

Implementing Information Security: Information security project management, Technical topics of implementation, Non-Technical Aspects of implementation, Security Certification and Accreditation. Information Security Maintenance: Security management models, Maintenance model Short case studies in Cryptography and Security: Secure Multi party calculation, Virtual Elections, Single Sign On, Secure Inter Branch Payment transactions, Cross site scripting vulnerability (Book 2)

Suggested Readings:

Prescribed Books

- Michael E Whitman and Herbert J Mattord, Principles of Information Security, Cengage Learning, 6 th Edition 2018
- 2. Atulkhate, Cruptographu and Network Security" 4 th edition, Tata McGraw Hill, 2019 Reference Books:
 - 3. Nina Godbole, "Information Systems Security: Security Management, Metrics, Frameworks and Best Practices" Second Edition, WILEY 2017
 - 4. Gupta Sarika, "Information and Cyber Security", Khanna Publishing House, Delhi
 - 5. V.K. Pachghare, "Cryptography and Information Security", PHI Learning

IV. SYLLABUS

Unit I	Syllabus Description	Target Hours
ñ . 5	Introduction: History, Critical Characteristics of Information, NSTISSC Security Model, Components of an Information System, Securing the Components, Balancing Security and Access, The SDLC, The Security SDLC.Need for Security: Business Needs, Threats, Attacks, and Secure Software Development	12
11	Legal, Ethical and Professional Issues: Law and ethics in Information Security, Relevant U.S. Laws, International Laws and Legal Bodies, Ethics and Information Security. Risk Management: Overview, Risk Identification, Risk Assessment, Risk Control Strategies, selecting a Risk Control Strategy, Quantitative versus Qualitative Risk Control Practices, Risk Management Discussion Points, and Recommended Risk Control Practices.	- 12
III	Planning for Security: Security policy, Standards and Practices, Security Blue Print, Security Education, Continuity strategies. Security Technology: Firewalls and VPNs, Physical Design, Firewalls, Protecting Remote connections.	10
IV	Security Technology: Intrusion Detection, Access Control, and other Security Tools: Intrusion Detection and Prevention Systems-Scanning, and Analysis Tools- Access Control Devices. Cryptography: Foundations of Cryptology, Cipher methods, Cryptographic Algorithms, Cryptographic Tools, Protocols for Secure Communications, Attacks on Cryptosystems	8
V	Implementing Information Security: Information security project management, Technical topics of implementation, Non-Technical Aspects of implementation, Security Certification and Accreditation. Information Security Maintenance: Security management models, Maintenance model Short case studies in Cryptography and Security: Secure Multi party calculation, Virtual Elections, Single Sign On, Secure Inter Branch Payment transactions, Cross site scripting vulnerability (Book 2)	8
	Total	

SuggestedReading:

- Michael E Whitman and Herbert J Mattord, Principles of Information Security, Cengage Learning, 6 th Edition 2018
- 2. Atulkhate, Cruptography and Network Security" 4th edition, Tata McGraw Hill, 2019 Brian W.
- 3. Nina Godbole, "Information Systems Security: Security Management, Metrics, Frameworks and Best Practices" Second Edition, WILEY 2017
- 4. Gupta Sarika, "Information and Cyber Security", Khanna Publishing House, Delhi
- 5. V.K. Pachghare, "Cryptography and Information Security", PHI Learning

V. E-RESOURCES

- 1. https://www.tutorialspoint.com/information-security
- 2. https://www.geeksforgeeks.org/what-is-information-security/
- 3. https://www.information-security.com

V. COURSE OBJECTIVES:

Course Overview: In this course students learn basics of information security, in both management aspect and technical aspect. Students understand of various types of security incidents and attacks, and learn methods to prevent detect and react incidents and attacks. Students will also learn basics of application of cryptography which are one of the key technologies to implement security functions.

The objectives of this course are to impart to the following to the students:

- To learn legal and technical issues in building secure information systems
- To provide an understanding of networksecurity
- To expose the students to security standards and practices

VI. COURSE OUTCOMES

After completing this course the student will be able to:

CO No.	Course Outcome	Taxonomy Level
PC701CS.1	Demonstrate the importance of IS ,role of IS professionals and various phases involved in Sec SDLC	Remembering
PC701CS.2	Understand the common threats and attacks of Information Security	Understanding
PC701CS.3	Identify security needs using risk management and choose the appropriate risk control strategy based on business needs.	Analyzing
PC701CS.4	Usage of reactive solutions, network perimeter solution tools such as firewalls, host solutions such as antivirus software and Intrusion Detection techniques	Understanding
PC701CS.5	Develop an understanding of security policies (such as authentication, integrity and confidentiality), as well as protocols to implement such policies in the form of message exchanges	Applying
PC701CS.6	Understand the technical and non-technical aspects of security project implementation and accreditation.	Analyzing

VII. MAPPING OF COS WITH POS & PSOS

Correlation Level: High - 3; Medium - 2; Low - 1

PO / CO	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1 0	PO1 1	PO1 2	P50 1	PSO2	PSO3
PC701 CS.1	2	3	1	1	3	3	3		1		2	*	2	1	2
PC701 CS.2		1	1	2	2	1	2			1			3	(#)	2
PC701 CS.3	3	2	2			2	2				1	=	3	:=:	
PC701 CS.4	3	1	2	2	3	2	2		1			4	2	1	
PC701 CS.5	3		2	2		2	2	2	1	1	1	¥	3	2	1
PC701 CS.6		2	2	2	3	2	2								
PC701 CS	2.7	1.8	1.6	1.8	2.7	2	2.1	1	1	1.	1.3	-	2.6	1.3	1.6

Gaps identified based on the mapping:

1. The syllabus covers theory, concepts and framework related to engineering knowledge. The Program Outcomes 3,6to12 are not directly addressed.

Plan of Action / Corrective measures:

1) Teaching the software quality concepts through ppts and virtual learning sites, will help in using modern ICT tools in learning the subject effectively. The following websites are provided for the students to watch and learn. This addresses PO3

https://www.information-security.com

https://www.tutorialspoint.com/information security/index.htm

- 2) Teaching of professional ethics can be integrated in the course by encourage to students to do the assignments and quizzes honestly and to teach them to report the experimental observation without manipulation.
- 3) Team work and technical communication is encouraged by giving the student group assignments and group tasks to solve a complex problem in parts.

Revised Mapping closing the gaps:

PO / CO	PO 1	PO2	PO3	PO4	PO5	PO6	P07	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO2	PSO3
PC701 CS.1	3	2	3	1	2	2	2					×	2	1	1
PC701 CS.2	3	3	1	2	3	3	2	3		3			3	1#22	3
PC701 CS.3	3	3			3	2	2				3	×	3	(#0)	
PC701 CS.4	3	1	3	3	3	2	3		3		3	-	2	3	
PC701 CS.5	3	3	2	2	3	3	3	1	2	2	1	-	3	2	1
PC701 CS.6	2	2	2	3	3	3	2	2	2	2			3		
PC701 CS	2.8	2.3	2.2	2.2	2.8	2.5	2.3	1	2.3	2.3	2.3	-	2.6	2	1.6

CO-PO/PSO mapping Justification

Mapped POs& PSOs (Direct):

PO1, PO2, PO3, PO4,.

Mapped POs& PSOs (Corrective measures): PO5,PO6,PO7, PO8, P09, PO10,PO11

Course outcomes:

PC701CS.1Demonstrate the importance of IS ,role of IS professionals and various phases involved in Sec SDLC(Remembering)

	Mapping Level	Justification			
PO1	3	Definitions of all types of testing types, such as white box, black box are foundation principles of Software verification and validation and directly contribute to engineering knowledge.			
PQ2	2	The above definitions are directly supportive in understanding the problem analysis.			
PO3	3	Encouraging learning of basic concepts through ICT teaching-Learning resources			
PO4	1	Practical approach to teach concepts in learning process			
PQ5	2	Group assignments and tasks			
PO6	2	Group assignments and mutual presentations			

PC701CS.2 Understand the common threats and attacks of Information Security(Understanding)

	Mapping Level	Justification
PO1	2	Understanding the Establishmentof SQA are all directly related to engineering knowledge and needs understanding of fundamental quality methods and principles.
PO2	1	Directly supportive for problem analysis
PO3	1	Encouraging learning from ICT learning tools and useful videos
PO4	2	Indirect but practical approach to teach honesty in learning process
PO5	2	Group assignments and tasks

P06	1	Group assignments and mutual presentations
	_	a. a.b. ass. O arter arter b. cocittation

PC701CS.3 Identify security needs using risk management and choose the appropriate risk control strategy based on business needs(Analyzing)

	Mapping Level	Justification
PO1	3	Applying the quality assurance metrics to evaluate quality for various types of softwares - This is directly enhancing engineering knowledge for problem solving.
PO2		
PO5	1	Encouraging learning from ICT material and videos
PO6	1	Indirect but practical approach to teach honesty in learning process
P07	1	Group assignments and tasks

PC701CS.4 Usage of reactive solutions, network perimeter solution tools such as firewalls, host solutions such as antivirus software and Intrusion Detection techniques (Understanding)

	Mapping Level	Justification
PO2	3	Directly contributing to engineering knowledge and analyzing to make appropriate choice of testing methods in engineering applications
PO3	3	Directly dealing with enhancing problem analysis skills
PO4	1	Directly supportive in designing of structural members based on analysis and suitable interpretation of the available data.
PO5	1	Forms foundation principles to solve complex problems.
PO6	1	Encouraging learning from ICT material and educational videos & animations

PC701CS.5 Develop an understanding of security policies (such as authentication, integrity and confidentiality), as well as protocols to implement such policies in the form of message exchanges

	Mapping Level	Justification
PO1	3	Directly enhancing engineering knowledge
PQ2	3	Directly dealing with enhancing problem analysis skills
PO3	2	Encourages comparison of testing techniques used
PO4	2	Involves interpretation skills from comparison of engineering data.
PO5	1	Encouraging learning from ICT material and educational videos & animations
PO6	1	Indirect but practical approach to teach honesty in learning process
PO9	1	Group assignments and tasks
PO10	1	Group assignments and mutual presentations

PC701CS.6 Understand the technical and non-technical aspects of security project implementation and accreditation.

	Mapping Level	Justification
PO1	3	Directly enhancing engineering knowledge but analyses and appropriate graphical representation of the engineering data.
PO2	3	Directly dealing with enhancing problem analysis skills
PO3	2	Essential pre-requisite in designing of structural members based on analysis and

		suitable interpretation of the available data.
PO4	2	Form foundation principles to solve complex problems in real life.
PO5	1	Encouraging learning from ICT material and educational videos & animations
PO8	1	Indirect but practical approach to teach honesty in learning process
PO9	1	Group assignments and tasks

VIII. TEACHING-LEARNING METHODOLOGY ADOPTED

- 1. Chalk and Talk
- 2. PPTs, Animations and Videos for illustrations
- 3. Learning by doing
- 4. Collaborative Learning (Think Pair Share)
- 5. Group Assignment Project

IX. METHOD OF ASSESSMENT OFCOs and POs:

COs	Relevant POs	Mode of Assessment
PC701CS .1-	POI: ENGINEERING KNOWLEDGE	Assignments, Quizzes, Internal
PC701CS .5	PO2: PROBLEM ANALYSIS	Examinations and External Examination
	PO3: DESIGN/ DEVELOPMENT OF SOLUTIONS	result
	PO4: CONDUCT INVESTIGATION ON COMPLEX	
	PROBLEMS	
	PSO1: PROFESSIONAL COMPETENCE	
PC701CS.1-	PO5: MODERN TOOL USAGE	Exercises to learn through ICT tools and
PC701CS .5		internet websites, Usage of Excel
		worksheets for problem solving
PC701CS .1-	PO8: ETHICS	Assignments, Quizzes
PC701CS .5		
PC701CS .1-	PO9: IINDIVIDUAL AND TEAM WORK	Group Assignments, Writing skills in
PC701CS .5	PO10: COMMUNICATION	documenting assignments, Presentations

X. LESSON PLAN:

The course plan is meant as a guideline. There may probably be changes.

S. No.	Unit	Topic	No. of Periods	Cumulative periods
1		 Introduction: History Software Quality Assurance Characteristics of information, NSTISSC Security model, Components of an information system, 	4	4
2		 Securing the components, balancing security and access, The SDLC, The security SDLC 	4	8
3		 Need for security: Business needs Threats, Attacks-secure software development 	7	15
4		 Legal, Ethical and Professional Issues: Law and ethics in information security, relevant U.S laws – international laws and legal bodies 	1	16
5	IIA	• relevant U.S laws – international laws and legal bodies	5	21
6		Ethics and information security	1	22
7		 Risk Management: Overview, Risk Identification, risk assessment, risk control strategies 	1	23
8	IIB	Selecting a risk control strategy	3	24
9		 Quantitative versus qualitative risk control practices Risk management discussion points Recommended risk control practices. 	1	25
10		Planning for security: Security policy	1	26
11	IIIA	 Standards and practices Security blue print Security education 	3	29
1 2		Continuity strategies	1	30
13	IIIB	 Security Technology: Firewalls and VPNs: Physical design firewalls 	2	32
14		Protecting remote connections	1	33
15		 Security Technology: Intrusion detection, Access control and other security tools: Intrusion detection and prevention systems 	3	36
16	IV -	Scanning and analysis tools, Access control devices	2	38
17		 Cryptography: Foundations of cryptograph, cipher methods, cryptographic algorithms. 	2	40

S. No.	Unit	Topic	No. of Periods	Cumulative periods
18		Cryptographic tools, Protocols for secure communications, Attacks on cryptosystems	1	41
31		 Implementing Information security: Information security project management, technical topics of implementation, non-technical aspects of implementation. Security certification and accreditation. 	3	44
32	V	 Security and Personnel: Positioning and staffing security function, Employment policies and practices, internal control strategies Information security Maintenance: Security management models. The maintenance model, Digital forensics. 	4	48
41		TOTAL		48

Prepared by: Dr.Shruthi SK, Asst. Professor, CSE

Signature:

Dept. of Computer Science Dept. of College of Engg. & Tech. International Strategy of Ling Kotl, Hydersbad.



METHODIST

COLLEGE UF ENGINEERING & TECHNOLOGY



(An UGC Autonomous Institution) Approved by AICTE, New Delhi & Affiliated to Osmania University Accredited by NBA and NAAC with A+

College Code: 1607

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Class Time - Table

Class: VII Semester BE CSE - A

2021 - 2022 Semester: VII

W F F-09 11 2021

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-	9:30 -10:30	11 10:30 – 11:30	III 11:30 – 12:30	12:30 - 01:15	IV 01:15 - 02:15	V 02:15 - 03:15	VI 03:15 - 04:15	VII 04:15 - 05:00
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THU	IS	DSR	DIS	N C	DSR - A1 / DIS - A2 LAB			MENTOR
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Information Security R – Data Science	Dr. Shruthi Sk	Code PC 751 CS	DSR LAB - Data	Name of the Faculty
R – Data Science	1	1 10 /01 (0	DSK LAB - Data	D. D. I.
ng R Programming	Dr. P. Lavanya	PC 752 CS	ScienceUsing R Lab DIS LAB – Distributed	Dr. P. Lavanya / Mrs. J. Sowmya Mr. A. Rajesh
	Mr. A. Rajesh	PW 761 CS	Systems Lab PW - I - Project Work - I	Mr. P.V. Ramanaiah / Mr. T.
(OE – II) –	Dr. D. Hday Kumar		Summer Internship	Praveen Kumar Dr. M. Sharada Vara Lakshmi
erpreneursmp			CISCO	Mrs. J. Sowmya
(OE _ II) _	OE – II) – rpreneurship Dr. D. Uday Kumar	OE – II) – rpreneurship Dr. D. Uday Kumar SI 762 CS	- Distributed Systems Mr. A. Rajesh PW 761 CS PW - I - Project Work - I OE - II) - Dr. D. Uday Kumar SI 762 CS

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Head of the Department Toch



METHODIST

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College Code: 1607

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Class Time - Table

Class: VII Semester BE CSE - B

2021 - 2022 Semester: VII

W E E-08 - 11 - 2021

	9:30 - 10:30	11 10:30 – 11:30	III 11:30 – 12:30	12:30 - 01:15	IV 01:15 - 02:15	V 02:15-03:15	VI 03:15 - 04:15	VII	
MON	DSR	OE - II	IS		DSR - B1 / DIS - B2 LAB			04:15 - 05:00	
TUE	IS	IS	OE – II	-				INTERNET	
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Γ) – Tui	orial Concern	Faculty			SUN	IMER INTERNSI	HIP	LIBRARY	

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty	
PC 701 CS	IS – Information Security	Dr. Shruthi Sk	PC 751 CS	DSR LAB - Data	Mr. T. Praveen Kumar /Mrs. Unnati	
PC 702 CS	DSR – Data Science Using R Programming	Mr. T. Praveen Kumar	PC 752 CS	ScienceUsing R Lab DIS LAB – Distributed	Mohan Khanapurkar	
PC 703 CS		Mr. A. Rajesh	PW 761 CS	Systems Lab PW - I - Project Work - I	Mr. A. Rajesh Mr. T. Praveen Kumar /	
OE 775 ME	ER (OE – II) – Enterpreneurship	Dr. D. Uday Kumar	SI 762 CS	Summer Internship	Mr. P.V. Ramanaiah Mr. D. Rajashekar	
				CISCO	Dr. Shruthi Sk	
		Class Coor	dinator:Dr.V.	Padmakar		

Tinn Knel Hudershad

Time Table Coordinaton pour 9/ Dept. of Computer Science

Head of the Department Abids, Hyderabad.

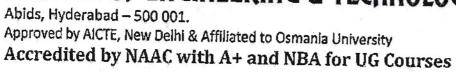


Class/Semester:

METHODIST



COLLEGE OF ENGINEERING & TECHNOLOGY





College Code: 1607

Status of Syllabus Completion before CIE-I/II

		(111V)	r:A.	•••••	Department: CSE				
Class	Coordinator Name:	Ma R Sandee	<u> </u>	***********	Syllat	ous Status as on:	24/8/21	1	
'SI, No.	Course/ Subject	Name of Faculty	Total No. of classes taken till date	Unit & % of Completed	No. of Classes required to complete the remaining Units	No. of extra classes required (excluding scheduled classes)	Remarks		
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3	Accounting	Mes A Boundayani	24	3.8 units	05 77	NH		-13.	
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6	Computer Organization	Mg R Sandeep	9.	9				7	
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Class Co-ordinator