K.S.Rangasamy College of Arts and Science (Autonomous)

Tiruchengode – 637 215

Department of Computer Applications

Elective Courses

- Principles of Information Security
- Client / Server Technology
- Software Engineering
- Social and Business Etiquette
- Artificial Intelligence
- Social Media Data Analytics

Encl.:

1. Copy of Scheme of Examination
2. Syllabus copy of courses highlighting the Elective along with course outcomes
3. Mapping of course to Elective

HoD – Computer Applications
Dr. T. S. VENKATESWARAN,
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K.S.RANGASAMY COLLEGE OF ARTS & SCIENCE (AUTONOMOUS) CONTROLLER OF EXAMINATIONS TIRUCHENGODE

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Dr. M. PRASAD, M.Sc., M.B.A., ...
Controller of Examinations
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Tiruchengode - 637 215. Tamilnadu. India.

SCHEME OF EXAMINATION

Course Code	Course	Hrs. of Instruction	Exam Duration (Hrs.)	Max Marks			Credits
				CA	CE	Total	
First Semester							
Part I							
18UTALB101/ 18UHILB101/ 18UFRLB101	Tamil-I/ Hindi-I/ French-I	5	3	25	75	100	3
Part II							
18UENLB101	General English I	5	3	25	75	100	3
Part III							
18UCAM101	Core I : Problem Solving Techniques	4	3	25	75	100	4
18UCAM102	Core II: Programming in C	4	3	25	75	100	4
18UMACAA101	Allied I: Mathematics for Computer Applications	4	3	25	75	100	4
18UCAMP101	Core Practical I: Office Package	3	3	40	60	100	2
18UCAMP102	Core Practical II: Programming in C	3	3	40	60	100	2
Part IV							
18UVE101	Value Education I: Yoga	2	3	25	75	100	2
		30				**800**	**24**
Second Semester							
Part I							
18UTALB201/ 18UHILB201/ 18UFRLB201	Tamil-II/ Hindi-II/ French-II	5	3	25	75	100	3
Part II							
18UENLB201	General English II	5	3	25	75	100	3
Part III							
18UCAM201	Core III: Object Oriented Programming with C++	4	3	25	75	100	4
18UCAM202	Core IV: Computer Organization and Architecture	4	3	25	75	100	4
18UMACAA201	Allied II: Scientific Computing Methods	4	3	25	75	100	4

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18UCAMP201	Core Practical III: Scientific Computing using C++	3	3	40	60	100	2
18UCAMP202	Core Practical IV: Designing Tools	3	3	40	60	100	2
Part IV							
18UVE201	Value Education II: Environmental Studies	2	3	25	75	100	2
		30				**800**	**24**
Third Semester							
Part III							
18UCAM301	Core V: Programming in Java	4	3	25	75	100	4
18UCAM302	Core VI: Data Structures	5	3	25	75	100	4
18UCAM303	Core VII: Web Designing	4	3	25	75	100	4
18UCCCAA301	Allied III: Principles of Accountancy	4	3	25	75	100	4
18UCAMP301	Core Practical V: Programming in Java	3	3	40	60	100	2
18UCCCAAP301	Allied Practical I: Accounting Package	3	3	40	60	100	2
Part IV							
18UCASBP301	SBC Practical I: Web Designing Using HTML , CSS	2	3	40	60	100	2
18UCSNM301	NMEC I	2	3	25	75	100	2
Non Credit							
18ULS301	Career Competency Skills I	1	-	-	-	-	-
18UCAAC301 / 18UCAAC302	Add-on Course I	2	3	-	100	100	-
		30				**900**	**24**
Fourth Semester							
Part III							
18UCAM401	Core VIII: Relational Database Management System	4	3	25	75	100	4
18UCAM402	Core IX: Operating System Concepts	5	3	25	75	100	4

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18UCAEL401/ 18UCAEL402/ 18UCAEL403	Elective I	4	3	25	75	100	3
18UCCCAA401	Allied IV: Cost and Management Accounting	4	3	25	75	100	4
18UCAMP401	Core Practical VI: RDBMS Package	3	3	40	60	100	2
18UCAMP402	Core Practical VII: Linux Programming	3	3	40	60	100	2
Part IV							
18UCASBP401	SBC Practical II: Data Structure using C	2	3	40	60	100	2
18UCSNM401	NMEC II	2	3	25	75	100	2
Non Credit							
18ULS401	Career Competency Skills II	1	-	-	-	-	-
18UCAAC401 / 18UCAAC402	Add-on Course II	2	3	-	100	100	-
		30				**900**	**23**

Fifth Semester

Part III							
18UCAM501	Core X: Web Application Development	5	3	25	75	100	4
18UCAM502	Core XI: Computer Networks	5	3	25	75	100	4
18UCAM503	Core XII: Cloud Computing	5	3	25	75	100	4
18UCAEL501/ 18UCAEL502/ 18UCAEL503/	Elective II	4	3	25	75	100	3
18UCAMP501	Core Practical VIII: Web Application Development	3	3	40	60	100	2
18UCAMP502	Core Practical IX: Computer Networks Lab	3	3	40	60	100	2
Part IV							

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18UCASBCP501	SBC Practical III: Web Services Using Python	2	3	40	60	100	2
Part V							
18UCAE501	Extension Activity	-	-	-	-	-	2
Non Credit							
18ULS501	Career Competency Skills III	1	-	-	-	-	-
18UCAPR601	Project & viva-voce	2					
		30				**700**	**23**
Sixth Semester							
Part III							
18UCAM601	Core XIII: Big Data Analytics	5	3	25	75	100	4
18UCAM602	Core XIV: Mobile Technology (**fifth unit as self study**)	5	3	25	75	100	4
18UCAM603	Core XV: E-Commerce	4	3	25	75	100	3
18UCAM604	Core XVI: Internet of Things	5	3	25	75	100	3
18UCAMP601	Core Practical X:R Programming	4	3	40	60	100	2
18UCAPR601	Project & Viva-Voce	4	3	40	60	100	4
Part IV							
18UCASBCP602	SBC Practical IV: Mobile Application Development	2	3	40	60	100	2
Non Credit							
18ULS601	Career Competency Skills IV	1	-	-	-	-	-
		30				**700**	**22**
					Grand Total	**4800**	**140**

- **Students have to undergo an Advanced Learner Course during the Second year of their course of study.**
- **Project hours can be divided into two such as 1. Problem presentation in the Class room 2. Problem implementation in the Lab**

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ELECTIVE I

(Student shall select any one of the following subject as Elective in **fourth** semester)

S.No	Subject Code	Subject
1.	18UCAEL401	Principles of information security
2.	18UCAEL402	Client Server technology
3.	18UCAEL403	Software Engineering

ELECTIVE II

(Student shall select any one of the following subject as Elective in **Fifth** semester)

S.No	Subject Code	Subject
1.	18UCAEL501	Social and Business Etiquette
2.	18UCAEL502	Artificial Intelligence
3.	18UCAEL503	Social Media Data Analytics

NON MAJOR ELECTIVE COURSE

(The department offers the following two subjects as Non Major Elective Course for other than the computer science students for third and fourth semesters)

S.No	Semester	Subject Code	Subject
1	III	18UCSN301	Internet Technology
2	IV	18UCSN401	HTML and Web Designing

ADD-ON COURSE

S.No	Semester	Subject Code	Subject
1	III	18UCAAC301	Digital Business
2	III	18UCAAC302	Ethics for Digital Era
3	IV	18UCAAC401	Digital Hygiene
4	IV	18UCAAC402	Fundamentals of Multimedia

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PROJECT DESCRIPTION

- The project work shall be carried out by group of students in the V semester and has to complete the work at the end of VI Semester.
- Upon completion of the project work/dissertation the candidate will be required to appear for a viva-voce conducted by an external examiner.
- The Student has to attend 3 reviews before completing his/her Project.
- All 3 reviews will be reviewed by External Resource Person.
- A candidate failing to secure the prescribed passing minimum in the dissertation shall be required to re-submit the dissertation with the necessary modifications.
- The assessment of students' performance in a semester is calculated by Continuous Internal Assessment (CA.) for 40 marks and External Assessment for 60 marks.

ADVANCED LEARNERS COURSE

(Student shall study the following Advanced Learner Course during their third semester and complete the course at the end of fourth semester)

S.No	Subject Code	Name of the Course
1	18UCAAL401	Software Testing

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18UCAEL401	ELECTIVE I: PRINCIPLES OF INFORMATION SECURITY	SEMESTER – IV

COURSE OBJECTIVES:

The Course aims

- The importance of Information Security
- Legal and ethical issues of Information Security
- Various Security Technologies to protect Information against threats
- Systematic Project Management to ensure Security in an Organization

Credits : 3 **Total Hours: 50**

UNIT	CONTENTS	Hrs	CO
I	**Introduction to Information Security:** Introduction – The History of Information Security – What Is Security? – Components of an Information System – Security in the Systems Life Cycle. **The Need for Security :** Introduction - Threats and Attacks – Technical Hardware Failures or Errors - Technical Software Failures or Errors	10	CO1
II	**Legal, Ethical, and Professional Issues in Information Security:** Introduction – Law and Ethics in Information Security- Relevant U.S. Laws – International Laws and Legal Bodies – Ethics and Information Security – Codes of Ethics at Professional Organizations. **Risk Management:** Introduction – An Overview of Risk Management– Risk Identification – Risk Assessment – Risk Control.	10	CO2
III	**Planning for Security:** Introduction - Information Security Planning and Governance - Information Security Policy, Standards, and Practices – The Information Security Blueprint – Security Education, Training, and Awareness Program. **Security Technology: Firewalls and VPNs:** Introduction – Access Control – Firewalls – Protecting Remote Connections.	10	CO3
IV	**Security Technology: Intrusion Detection and Prevention Systems, and Other Security Tools :** Introduction – Intrusion Detection and Prevention Systems – Honeypots, Honeynets, and Padded Cell Systems – Scanning and Analysis Tools. **Cryptography:** Cipher Methods – Cryptographic Algorithms.	10	CO4
V	**Implementing Information Security:** Introduction – Information Security Project Management – Technical Aspects of Implementation – Nontechnical Aspects of Implementation – Information Systems Security Certification and Accreditation. **Information Security Maintenance:** Introduction – Digital Forensics.	10	CO5

TEXT BOOK(S)	
1	*Michael E.Whitman and Herbert J.Mattord* .2015. **Principles of Information Security. [FifthEdition]** Cengage Learning India Private Limited, Delhi.
REFERENCE BOOKS	
1	*Calabrese.* 2006. **Information Security Intelligence: Cryptographic Principles and Applications.** [India Edition]. Thomson Delmar Learning Publications.
2	*Bhaskar, S.M. and Ahson. S.I.* 2008. **Information Security – A Practical Approach**. Narosa Publishing House, New Delhi.

COURSE OUTCOMES (CO):

After completion of the course, the students will be able to

CO1	Understand the history and necessity of information security.
CO2	Familiarity of Relevant laws and ethics, risk management in firm.
CO3	Understand the Plan for security and its technologies.
CO4	Ability to understand intrusion detection and prevention system, Security tools.
CO5	Understand about the Security Project management and implementation, e-Discovery.

MAPPING:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	M	M	M	L	H
CO2	M	M	M	M	H
CO3	M	M	M	M	H
CO4	M	M	H	H	H
CO5	L	L	M	H	H

H-High; M-Medium; L-Low

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18UCAEL402	ELECTIVE I: CLIENT/SERVER TECHNOLOGY	SEMESTER – IV

COURSE OBJECTIVES:

The Course aims

- To understand Client/Server Database Server Model and its Capabilities.
- Explores Transaction Processing, Groupware Model, Distributed Object Model, Applications of Client/Server.

Credits : 3 **Total Hours: 50**

UNIT	CONTENTS	Hrs	CO
I	**Your Guide to the New World:** The Survival Plan. **Welcome to Client/Server Computing:** The Client/Server Computing Era – What Is Client/Server? – Will the Real Client/Server Please Stand Up? – Fat Servers or Fat Clients? – 2-Tier versus 3-Tier. **Client/Server Building Blocks**: Client/Server: A One Size Fits All Model – Inside the Building Blocks.	10	CO1
II	**Clients, Servers, and Operating Systems:** The Anatomy of a Server Program – What Does a Server Need From an OS? – Server Scalability – Client Anatomy 101.**The OS Wars: Meet the Players:** Client OS Trends – Server OS Trends. **NOS: Creating the Single System Image:** NOS Middleware: The Transport Illusion. **RPC, Messaging, and Peer-to-Peer:** Peer-to-Peer Communications – Remote Procedure Call (RPC).	10	CO2
III	**SQL Database Servers**: The Fundaments of SQL and Relational Databases – What Does a Database Server Do? – Stored Procedures, Triggers, and Rules. **SQL Middleware and Federated Databases:** SQL Middleware: The Options – Will the Real SQL API Please Stand Up? – Open SQL Gateways. **Data Warehouses: information Where You Want It:** Where Is That OLTP Data Kept? – Information at Your Fingertips – The Data Warehouse.	10	CO3
IV	**Client/Server Groupware:** Why is Groupware Important? – What is Groupware? – The Components of Groupware. **Distributed Objects and Components:** What Distributed Objects Promise – From Distributed Objects To Components – 3-Tier Client/Server, Object-Style. **CORBA: From ORBs To Business Objects:** Distributed Objects, CORBA-Style – OMG's Object Management Architecture.	10	CO4
V	**Web Client/Server: The Hypertext Era:** Client/Server, Web Style – So What Exactly Is a URL? – HTTP. **Web Client/Server: The Interactive Era:** CGI: The Server Side of the Web – Web Security. **Client/Server Distributed System Management:** Dealing With	10	CO5

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	Chaos and Learning to Love It – Manager to Agents: What's Going on out There? – The Components of an Open DSM Platform. **Client/Server Tools and Application Development:** Client/Server Application Development Tools – Client/Server Application Design.		

TEXT BOOK(S):

1	*Robert Orfali, Dan Harkey, Jeri Edwards,* **"The Essential Client/Server Survival Guide"**, Second Edition, 2007, Galgotia Publication.

REFERENCE BOOKS:

1	*Dawana Travis Dewire,* **"Client/Server Computing"**, [3rd Reprint 2005], Tata McGraw-Hill Publishing Company Limited, New Delhi.
2	*Patrick N.Smith*and *Steve L.Guengesich,* **"Client/Server Computing"**, [2nd Edition], A Prentice Hall Computer Publishing Reprint, New Delhi, 2002.

COURSE OUTCOMES (CO):

After completion of the course, the students will be able to

CO1	Understand Client/Server Model and its Infrastructure
CO2	Explore Clients, Servers and Operating System
CO3	Database Server Model of Client/Server
CO4	Groupware Model and Distributed Object Model of Client/Server
CO5	Explores Internet from Client/Server Perspective and to Manage Client/Server Applications

MAPPING:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	M	H	H
CO2	M	M	H	M	H
CO3	M	H	M	M	H
CO4	M	H	M	M	H
CO5	H	H	M	H	H

H-High; M-Medium; L-Low

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18UCAEL403	ELECTIVE I: SOFTWARE ENGINEERING	SEMESTER – IV

COURSE OBJECTIVES:

The Course aims

- The System Development Strategies
- Basics of Software Testing
- The Project Management and Quality Management

Credits : 3 **Total Hours: 50**

Unit	Topics Covered	Hrs	CO
I	**Introduction**: FAQs about software engineering – Professional and ethical responsibility. **Software processes**: Software process models – Process iteration – Process activities - The Rational Unified Process. **Project management**: Management activities – Project planning – Project scheduling – Risk management.	10	CO1
II	**Software requirements**: Functional and non-functional requirements – System requirements – The software requirements document. **Requirements engineering processes**: Feasibility studies – Requirements elicitation and analysis – Requirements validation. **System models**: Context models – Behavioural models – Data models – Object models – Structured methods.	10	CO2
III	**Architectural design**: Architectural design decisions – System organisation – Modular decomposition styles. **Distributed systems architectures**: Multiprocessor architectures – Client-server architectures – Distributed object architectures. **Object-oriented design**: Objects and object classes – An object-oriented design process – Design evolution.	10	CO3
IV	**Rapid software development**: Agile methods – Extreme programming – Rapid application development – Software prototyping. **Verification and validation**: Planning verification and validation – Software inspections. **Software testing**: System testing – Component testing – Test case design – Test automation.	10	CO4
V	**Managing people**: Selecting staff – Motivating people – Managing groups – The People Capability Maturity Model. **Software cost estimation**: Estimation techniques – Algorithmic cost modelling (the COCOMO model). **Quality management**: Process and product quality – Quality assurance and standards – Quality planning – Quality control.	10	CO5

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TEXT BOOK(S):	
1	Ian Sommerville. 2009, **Software Engineering,** [Eighth Edition], Pearson Education Ltd, New Delhi
REFERENCE BOOKS:	
1	*Roger S.Pressman.* 2010, **Software Engineering: A Practitioner's Approach,** [Seventh Edition]. McGrawHill, Newyork.
2	*Deepak Jain*, 2009, **Software Engineering: Principles and Practices,** [First Edition]. Oxford University Press.
3	*Waman S Jawadekar*, 2008, **Software Engineering: a Primer**, [First Edition]. Tata Mc Graw Hill, New Delhi.
WEB REFERENCES:	
1	https://www.tutorialspoint.com/software_engineering/index.htm
2	https://en.wikipedia.org/wiki/Software_engineering
3	https://www.edx.org/course/software-engineering-introduction-ubcx-softeng1x

COURSE OUTCOMES (CO):

After completion of the course, the students will be able to

CO1	Understand basic Project Management Activities
CO2	Prepare Software Requirement Specifications and understand System Models
CO3	Understand the Architectural Design and Object-oriented Design.
CO4	Understand the concepts associated with RAD and Testing.
CO5	Understand the concepts associated with People Management, Cost Estimation and Quality Management

MAPPING:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	M	M	M	M	H
CO2	L	H	M	L	H
CO3	M	L	H	L	H
CO4	H	H	M	H	M
CO5	L	M	M	H	M

H-High; M-Medium; L-Low

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18UCAEL501	ELECTIVE II: SOCIAL AND BUSINESS ETIQUETTE	SEMESTER-V

COURSE OBJECTIVES:

The Course aims:

- To establish social and business ethical behavior in society.
- To explain and demonstrate appropriate dressing and communication in both society and business.
- To develop an action plan to improve personal professionalism.

Credits: 3 **Total Hours: 40**

UNIT	CONTENTS	Hrs	CO
I	**Conquering Business From the Break Room to the Boardroom:** Networking- Executive Wardrobe Suggestions for Him- Executive Wardrobe Suggestions for Her- In the Workplace- Receiving Line Etiquette- Stand and Deliver.	8	CO1
II	**Conquering Business From the Break Room to the Boardroom:** Office Technology and Social Media Savvy- Leaving the Company- **The Delicate Art of a Powerful Business Meal:** Dining Etiquette from A to Z- Navigating a Buffet Line- 10 Foods to Avoid at a Lunch Job Interview.	8	CO2
III	**The Delicate Art of a Powerful Business Meal:** The Importance of Lunch at the Office- How to Propose an Eloquent Toast- Negotiating After- Work Camaraderie (a.k.a., Happy Hour Fun)- **Social Skills That Dazzle and Shine:** Travel.	8	CO3
IV	**Social Skills That Dazzle and Shine:** Host and Guest Duties- How to Host a Dazzling Dinner Party- Dinner Party Guest Faux Pas- RSVP Etiquette- How to Write a	8	CO4

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	Notable "Thank-You"- Party Dress Code Defined.		
V	**Social Skills That Dazzle and Shine:** Hosting a Housewarming – Party- Talking Polite Politics- Weddings- Other Social Events Smart Tips for Daily Savings- Don't Settle for the Scraps.	8	CO5

TEXT BOOK(S):	
1	*Diane Gottsman, 2017.* **Modern Etiquette for a Better Life: Master All Social and Business Exchanges Paperback** , Page Street Publishing Co.
REFERENCE BOOKS:	
1	*Barbara Pachter,2013.* **The Essentials of Business Etiquette: How to Greet, Eat, and Tweet Your Way to Success Paperback,**McGraw Hill Education.
2	*Lillian H. Chaney, Jeanette S. Martin 2010.* **The Essential Guide to Business Etiquette,** Harper Collins Publisher.
3	*ShitalkakkarMehra,2012.* **Business Etiquette,** Harper Business(Herper Collins Publisher.
4	*SarveshGulati, 2012.* **Corporate Grooming and Etiquette,** Rupa Publications India Pvt. Ltd.
WEB REFERENCES:	
1	http://www.db-business-ethics.org
2	http://www.business-ethics.com
3	http://www.investopedia.com -Business -Business Essentials.com

K.S.RANGASAMY COLLEGE OF ARTS & SCIENCE (AUTO.) CONTROLLER OF EXAMINATIONS TIRUCHY

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COURSE OUTCOMES (CO):

On Successful completion of this course, the student can	
CO1	Know the basic ethics to behave in the society.
CO2	Understand etiquette morals of everyday activity.
CO3	Enhance communication, helps to groom in business.
CO4	Improvise civility at workplace and network in business.
CO5	Understand entertaining and social skills in business.

MAPPING

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	H	L	M	L	L
CO2	M	H	L	L	L
CO3	M	M	H	L	L
CO4	L	M	L	M	L
CO5	L	L	M	M	M

H-High; M-Medium; L-Low

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18UCAEL502	ELECTIVE II: ARTIFICIAL INTELLIGENCE	SEMESTER-V

COURSE OBJECTIVES:

The Course aims:

- To learn how computers can be made to perform intellectual tasks like decision making, problem solving and perception
- To learn how system is made to understand human communication

Credits: 3 **Total Hours: 40**

UNIT	CONTENTS	Hrs	CO
I	**Introduction:** Early History of AI – The Middle Ages of AI Development - The Dark Ages of AI Research - The AI Renaissance - To the Present - The Advent of Wireless - HAL 9000 - To The Future – CYBORGS. **What is Intelligence?:** Defining Intelligence: An Impossible Task? - Animal Intelligence - Brain Size and Performance - Sensing and Movement - Alien View - Subjective Intelligence.	8	CO1
II	**What is Intelligence?:** IQ Tests- Nature Versus Nurture - Twins - Comparative Intelligence. **Classical AI:** Introduction - Expert Systems - Conflict Resolution - Multiple Rules - Forward Chaining - Backward Chaining - Good Points - Problems With Expert Systems - Fuzzy Logic – Fuzzification - Fuzzy Rules – Defuzzification - Fuzzy Expert System.	8	CO2
III	**Classical AI:** Problem Solving - Breadth-First Search - Depth-First Search – Depth - Limited Search - Bidirectional Search - Searching Problems - Practical Search Examples - Heuristic Searching - Knowledge Representation – Frames - Methods And Demons - Machine Learning - Data Mining – Correlations - Decision Trees - Fuzzy Trees – Applications.	8	CO3

IV	**The Philosophy of AI:** Introduction - Starting Point - Penrose's Pitfall - Weak AI – Strong AI - Brain-In-A-Vat Experiment - Rational AI - Brain Prosthesis Experiment - The Chinese Room Problem - The Emergence of Consciousness - Technological Singularity - The Turing Test - What Does The Turing Test Actually Test? - Loebner Competition - Can a Machine Tell a Joke? - Argument From Disability.	8	CO4
V	**MODERN AI:** Introduction - Biological Brain - Basic Neuron Model - Perceptrons And Learning – Self - Organising Neural Network - N-Tuple Network - Evolutionary Computing - Genetic Algorithms - Genetic Algorithm: Simple Example - Genetic Algorithms: Some Comments - Agent Methods - Agents For Problem Solving - Software Agents – Multiagents - Hardware Agents - Subsumption Architecture.	8	CO5

TEXT BOOK(S):

1	*Kevin Warwick*, "**Artificial Intelligence: the basics**", 2012, Routledge Publishing, New York

REFERENCE BOOKS:

1	*Elaine Rich, Kevin Knight*, "**Artificial Intelligence**", 2007, [Second Edition], Tata McGraw-Hill Publishing Company Ltd, New Delhi.
2	*Stuart Russel*, "**Artificial Intelligence: A Modern Approach**", 2007, [Second Edition], Pearson Education Inc.
3	*Dan W Patterson*, "**Introduction to Artificial Intelligence and Expert System**", 1999, [Sixth Indian Reprint], Prentice Hall of India Pvt. Ltd, New Delhi

K.S. RANGASAMY COLLEGE OF ARTS & SCIENCE (AUTONOMOUS) CONTROLLER OF EXAMINATIONS TIRUCHENGODE

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4	*Eugene Charnaik, Drew McDermott,* **"Introduction to Artificial Intelligence"**,1999, [Second ISE Reprint], Eastern Press Pvt. Ltd.
5	*RajendraAkerkar,* **"Introduction to Artificial Intelligence"**, 2008, [Third Printing], Prentice Hall of India Pvt. Ltd, New Delhi
WEB REFERENCES:	
1	https://data-flair.training/blogs/ai-tutorials-home/
2	https://www.tutorialspoint.com/artificial_intelligence/
3	https://intellipaat.com/blog/tutorial/artificial-intelligence-tutorial/
4	https://www.javatpoint.com/artificial-intelligence-tutorial
5	https://www.edureka.co/blog/artificial-intelligence-tutorial/

COURSE OUTCOMES (CO):

On Successful completion of this course, the student can	
CO1	Understand the basics of AI and different types of Intelligence
CO2	Understand the Classical AI Concepts
CO3	Learn the Algorithms/methods used in Classical AI concepts
CO4	Understand the Philosophy of AI
CO5	Learn the Modern AI concepts with the Methods/ Algorithms

MAPPING:

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	H	M	L
CO2	L	H	M	H	M
CO3	L	H	M	H	H
CO4	L	H	M	H	H
CO5	L	H	M	H	H

H-High; M-Medium; L-Low

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18UCAEL503	ELECTIVE II: SOCIAL MEDIA ANALYTICS	SEMESTER-V

COURSE OBJECTIVES:

The Course aims

- To understand the fundamentals of Data Analytics.
- To learn various Social Media Data Analytics tools.

Credits: 3 **Total Hours: 40**

UNIT	CONTENTS	Hrs	CO
I	**A Social Media Analytics: An overview:** Purpose of Social Media Analytics – Social Media Vs Traditional Business Analytics –Seven Layers of Social Media Analytics – Types of Social Media Analytics - Social Media Analytics Cycle – Challenges to Social Media Analytics - Social Media Analytics Tools.	8	CO1
II	**Introduction to Social Media:** World Wide Web – Web 1.0 - Web 2.0 - Web 3.0 – Social Media- Core Characteristics of Social Media – Types of Social Media. **Social Media Text Analytics:** Types of Social Media Text– Purpose of Text Analytics – Steps in Text Analytics - Social Media Text Analysis Tools.	8	CO2
III	**Social Media Actions Analytics:** What Is Action Analytics? -Common Social Media Actions – Action Analytics Tools. **Mobile Analytics:** What is Mobile Analytics? – Types of Apps – Characteristics of Mobile Apps –Developing your own App – Mobile Analytics Tools.	8	CO3
IV	**Social Media Hyperlink Analytics:** Types of Hyperlinks-	8	CO4

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	Hyperlink Analytics –Hyperlink Analytics Tools. **Location Analytics:** Sources of Location Data – Categories of Location Analytics – Location Analytics and Privacy Concerns - Location Analytics Tools.		
V	**Search Engine Analytics:** Types of Search Engines –Search Engine Analytics - Search Engine Analytics Tools. **Analytics – Business Alignment:** Understanding Social Media and Business Alignment – Formulating a Social Media Strategy –Managing Social Media Risks.	8	CO5

TEXT BOOK(S):

1	*GoharF.Khan*. 2015. **Seven Layers of Social Media Analytics – Mining Business Insights from Social Media.**Kindle Edition.

REFERENCE BOOKS:

1	*GoharF.Khan*. 2018. **Creating Value with Social Media Analytics.**Create Space, Seattle, USA.
2	*Matthew Ganis, AvinashKohirkar*, 2016. **Social Media Analytics – Techniques and Insights for Extracting Business Value Out of Social Media.** IBM Press Pearson pic.
3	*Marshall Sponder*, 2012. **Social Media Analytics – Effective Tools for Building and Interpreting Metrics.**McGraw Hill.
4	*Krish Krishnan, Shawn Rogers*, 2014. **Social Data Analytics.** Elsevier.

WEB REFERENCES:

1	https://7layersanalytics.com/
2	https://www.analytics-book.com
3	https://www.klipfolio.com/resources/dashboard-examples/social-media

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COURSE OUTCOMES (CO):

On Successful Completion of this Course, the Student can	
CO1	Understand the foundations of Social Media Analytics
CO2	Learn Social Media Text Analytics and Tools
CO3	Enhance the knowledge of Action Analytics and Mobile Data Analytics Tools
CO4	Realize the potential of Location Data Analytics and Hyperlinks Analytics Tools.
CO5	Understand and Use Search engine Analytics tools

MAPPING

PSO / CO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	L	M	L	L	L
CO2	L	H	L	M	M
CO3	L	H	L	M	H
CO4	L	H	L	M	H
CO5	L	H	L	M	H

H-High; M-Medium; L-Low

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