

INSTITUTE VISION

To be a pioneer in engineering and management education by providing amicable ambience and being a centre for learning thereby perpetuating versatile professionals in engineering and management suitable for industry, higher education and research.

INSTITUTE MISSION

- Developing, nurturing and building professionals with technical, research and managerial expertise, intellectual proficiency, right attitude and moral ethics.
- Building infrastructure that earmarks the institution to be the most preferred educational destination and provides the right ambience for creative and innovative teaching - learning process.
- Enabling learners to broaden their horizon and helping to meet global challenges.

QUALITY POLICY

To establish and implement a robust quality system at Kingston Engineering College, encircling teaching, learning, research, and self-reliance, focusing on core and support functions to ensure accountability to stakeholders through continuous improvement and sustenance towards promoting holistic academic excellence.

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B. E. COMPUTER SCIENCE AND ENGINEERING
REGULATION 2026
CHOICE BASED CREDIT SYSTEM

VISION :

To promote highly ethical and innovative computer professionals through excellence in teaching, training and research.

MISSION:

- To produce globally competent professionals, motivated to learn the emerging technologies and to be innovative in solving real world problems.
- To promote research activities amongst the students and the members of faculty that could benefit the society.
- To impart moral and ethical values in their profession.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: To equip students with essential background in computer science, basic electronics and applied mathematics.

PEO 2: To prepare students with fundamental knowledge in programming languages and tools and enable them to develop applications.

PEO 3: To encourage the research abilities and innovative project development in the field of networking, security, data mining, web technology, mobile communication and also emerging technologies for the cause of social benefit.

PEO 4: To develop professionally ethical individuals enhanced with analytical skills, communication skills and organizing ability to meet industry requirements.

PROGRAMME OUTCOMES (POs)

[PO1] Engineering Knowledge: Apply math, science, and engineering fundamentals to complex problems.

[PO2] Problem Analysis: Identify and analyze complex problems using research and sustainability principles.

[PO3] Design Solutions: Design systems and processes considering health, safety, cost, culture, and environment.

[PO4] Investigations: Use experiments, modelling, and data analysis to reach valid conclusions.

[PO5] Engineering Tools: Apply modern tools for modelling and problem-solving, recognizing their limits.

[PO6] Society & Environment: Assess societal, legal, and environmental impacts of engineering solutions.

[PO7] Ethics: Commit to ethics, human values, diversity, and legal compliance.

[PO8] Teamwork: Work effectively as an individual and in multidisciplinary teams.

[PO9] Communication: Communicate clearly in reports, presentations, and documentation across diverse groups.

[PO10] Management & Finance: Apply management and economic principles in projects and teamwork.

[PO11] Lifelong Learning: Engage in continuous learning, adapt to new technologies, and think critically.

PROGRAM SPECIFIC OUTCOMES (PSOs)

A graduate of the Computer Science and Engineering Program will demonstrate,

PSO1: Design and develop efficient and reliable computing solutions for real time applications.

PSO2: Utilize modern tools and platforms for development of innovative software systems for industrial and societal requirements.

PSO3: Upskill with rapid advancements in the field of Computer Engineering and exhibit research aptitude, work effectively in multidisciplinary teams and uphold ethical practices.

MAPPING OF PROGRAM EDUCATIONAL OBJECTIVES WITH PROGRAM OUTCOMES

A broad relation between the program objective and the outcomes is given in the following table

PEOs / POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
PEO1	3	3	2	2	3	–	–	–	2	2	2
PEO2	2	2	3	2	3	–	–	–	2	2	2
PEO3	2	2	3	3	3	3	3	2	2	2	3
PEO4	2	2	2	2	2	2	3	3	3	3	3

1 - Low, 2 - Medium, 3 – High, ‘–’ – No Correlation

MAPPING OF PROGRAM EDUCATIONAL OBJECTIVES WITH PROGRAM SPECIFIC OUTCOMES

A broad relation between the program objective and the outcomes is given in the following table

PEOs / PSOs	PSO1	PSO2	PSO3
PEO1	3	3	2
PEO2	3	3	2
PEO3	3	3	3
PEO4	2	2	3

1 - Low, 2 - Medium, 3 – High, ‘-’ – No Correlation



Semester II

B.E. COMPUTER SCIENCE AND ENGINEERING
REGULATION 2026
CURRICULUM SEMESTER I to VIII
CHOICE BASED CREDIT SYSTEM

Semester I									
S. NO	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	HS26101	Heritage of Tamil	HS	1	1	0	0	1	4,11,17
2	MA26101	Matrices and Calculus	BS	4	3	1	0	4	4,9,11,12
Lab Integrated Theory Course									
3	HS26102	English for Interpersonal Communication-I	HS	3	1	0	2	2	4,8,16
4	EC26101	Digital Principles and System Design	ES	5	3	0	2	4	7,9,11,12
5	CS26C01	Programming in C	ES	5	3	0	2	4	4,8,9
6	PH26C01	Physics for Computer Science	BS	4	2	0	2	3	7,8,9,12
Practical Course									
7	CS26C11	Engineering Foundation Laboratory (CSE&ECE)	ES	2	0	0	2	1	4,8,9,12
Employability Enhancement Course									
8	PD26S01	Digital Professional Skills	EE	2	0	0	2	1	4,8,9
Mandatory Course									
9	MC26101	Student Induction Program	MC	3 weeks	0	0	0	0	4
10	MC26102	Foreign Language - Level I (Japanese/German)	MC	2	0	0	2	1	4,8,17
11	MC26103	Physical Education I	MC	2	0	0	2	0	3,4,5
Audit Course									
12	AC26101	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week	-	-	-	0	3,11,17
TOTAL				30	13	1	16	21	-

(For the Students admitted from the Academic Year 2026-27)

S. NO	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	HS26201	Tamil and Technology	HS	1	1	0	0	1	11
2	MA26201	Linear Algebra	BS	4	3	1	0	4	4,8,9
3	HS26202	Universal Human Values-II: Understanding Harmony	HS	3	3	0	0	3	3,4,16
Lab Integrated Theory Course									
4	HS26203	English for Interpersonal Communication-II	HS	3	1	0	2	2	4,8,9
5	CS26C02	Python Programming	ES	5	3	0	2	4	4,8,9
6	CS26201	Data structures	PC	5	3	0	2	4	4,8,9,12
7	CH26C01	Chemistry for Engineers	BS	4	2	0	2	3	6,7,9,12,13
Practical Course									
8	ME26C11	Engineering Foundation Laboratory (Mech)	ES	2	0	0	2	1	4,8,9,12
Employability Enhancement Course									
9	PD26S02	Profession Excellence and Career Development	EE	2	0	0	2	1	3,4,8,16
Mandatory Course									
10	MC26201	Foreign Language- Basic level II (Japanese/ German)	MC	2	0	0	2	1	4,8,17
11	MC26202	Physical Education II	MC	2	0	0	2	0	3,4,5
Audit Course									
12	AC26201	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week	-	-	-	0	3,11,17
TOTAL				33	16	1	16	24	

Semester III

S. NO.	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	MA26C01	Discrete Mathematics	BS	4	3	1	0	4	4,9,11,12,16
2	CS26301	Operating Systems	PC	4	3	1	0	4	4,8,9
Lab Integrated Theory Course									
3	CS26302	Programming in Java	PC	5	3	0	2	4	4,8,9
4	CS26303	Algorithms	PC	5	3	0	2	4	4,8,9
5	CS26304	Design thinking and Idea Innovation	ES	4	2	0	2	3	4,9
Practical Course									
6	CS26311	Operating Systems Laboratory	PC	2	0	0	2	1	4,8,9
Employability Enhancement Course									
7	CS26S01	Employability Enhancement Skill – I	EE	2	0	0	2	1	4,8
8	CS26S02	Industry Certification Course-I	EE	2	0	0	2	1	-
Mandatory Course									
9	MC26301	Environmental and Sustainable Future	MC	1	1	0	0	1	11,12,13
10	MC26302	Foreign Language-Level-III (Japanese/German)	MC	2	0	0	2	1	4,8,17
Audit Course									
11	AC26301	NSS/YRC/SDG/CLUB ACTIVITIES	AC	-	0	0	0	0	3,11,17
TOTAL				31	15	2	14	24	

Semester IV

S.NO.	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	MA26C02	Probability and Statistics	BS	4	3	1	0	4	3,4,8,9, 13
2		Open Elective – I	OE	3	3	0	0	3	-
Lab Integrated Theory Course									
3	CS26401	Database Management Systems	PC	4	2	0	2	3	4,8,9
4	CS26402	Computer Networks	PC	4	2	0	2	3	4,8,9
5	CS26403	Artificial Intelligence and Machine learning	PC	5	3	0	2	4	3,8,9
6		Professional Elective – I	PE	4	2	0	2	3	4,8,9
Practical Course									
7	CS26411	Innovation Design Laboratory	PC	4	0	0	4	2	4,9
Employability Enhancement Course									
8	CS26S03	Employability Enhancement Skill – II	EE	2	0	0	2	1	4,8
9	CS26S04	Industry Oriented Course-I	EE	2	0	0	2	1	-
Mandatory Course									
10	MC26401	Foreign Language- Level-IV (Japanese/German)	MC	2	0	0	2	1	4,8, 17
11	MC26402	Indian Constitution	MC	1	1	0	0	0	4,16
Audit Course									
12	AC26401	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week	-	-	-	-	3,11, 17
TOTAL				35	16	1	18	25	

Semester V

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	CS26501	Fundamentals of Data Science	PC	4	3	1	0	4	3,4,8,9
2		Open Elective – II	OE	3	3	0	0	3	-
Lab Integrated Theory Course									
3	CS26502	Automata and Compiler Design	PC	5	3	0	2	4	4,8,9,12
4		Professional Elective - II	PE	4	2	0	2	3	4,8,9
5		Professional Elective - III	PE	4	2	0	2	3	4,8,9
6		Professional Elective - IV	PE	4	2	0	2	3	4,8,9
Practical Course									
7	CS26511	Foundations of Data Science Laboratory	PC	2	0	0	2	1	3,4,8,9
8	CS26512	Innovation Product Development-I Laboratory	PC	2	0	0	2	1	4,8,9,12
Employability Enhancement Course									
9	CS26S05	Career Readiness - I	EE	2	0	0	2	1	4,8
Mandatory Course									
10	MC26501	Disaster Management	MC	1	1	0	0	0	12,13
Audit Course									
11	AC26501	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week				0	3,11,17
TOTAL				31	16	1	14	23	
For Honours Degree									
1		Multidisciplinary Project (Capstone Design Project-Level-I)	EE	12	0	0	12	6	4,8,9,11,12
(or)									
1		Honours Elective – I	PE	4	2	0	2	3	
2		Honours Elective – II	PE	4	2	0	2	3	
For Minor Degree									
1		Minor Elective – I	PC	3	3	0	0	3	
2		Minor Elective – II	PC	3	3	0	0	3	

Semester VI

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1		Management Elective	HS	3	3	0	0	3	4,8,9
2	CS26601	Cryptography and Cyber Security	PC	4	3	1	0	4	4,8,9
3		Open Elective – III	OE	3	3	0	0	3	-
Lab Integrated Theory Course									
4	CS26602	Object oriented Software Engineering	PC	4	2	0	2	3	4,8,9
5		Professional Elective – V	PE	4	2	0	2	3	4,8,9
Practical Course									
6	CS26611	Innovation Product Development-II Laboratory	PC	4	0	0	4	2	4,8,9,12
Employability Enhancement Course									
7	CS26S06	Career Readiness – II	EE	2	0	0	2	1	4,8
8	CS26S07	Industry-Oriented Course-II	EE	2	0	0	2	1	-
Mandatory Course									
9	MC26601	Introduction to Indian Knowledge System	MC	1	1	0	0	0	4,11,12
Audit Course									
10	AC26601	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week				0	3,11,17
TOTAL				27	14	1	12	20	
For Honours Degree									
1		Multidisciplinary Project (Capstone Design Project-Level-II)	EE	12	0	0	12	6	4,8,9,11,12
(or)									
1		Honours Elective – III	PE	4	2	0	2	3	
2		Honours Elective – IV	PE	4	2	0	2	3	
For Minor Degree									
1		Minor Elective – III	PC	3	3	0	0	3	
2		Minor Elective – IV	PC	3	3	0	0	3	

Semester VII

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	HS26701	Research and Publication Ethics	HS	3	2	1	0	3	4, 9,16,17
2	CS26701	Mobile App Development	PC	3	3	0	0	3	8,9,10,11
Lab Integrated Theory Course									
3	IT26C01	Cloud Computing	PC	4	2	0	2	3	8,9,12
4		Professional Elective – VI	PE	4	2	0	2	3	4,8,9
Practical Course									
5	CS26711	Mini Project	EE	4	0	0	4	2	4,8,9
6	CS26712	Internship	EE	4 Weeks	-	-	-	2	-
7	CS26713	Mobile App Development Laboratory	PC	3	0	0	3	2	8,9,10,11
Employability Enhancement Course									
8	CS26S08	Industry Readiness and Professional Excellence	EE	2	0	0	2	1	4,8,9, 12
9	CS26S09	Industry Certification Course-II	EE	2	0	0	2	1	-
TOTAL				25	9	1	15	20	
For Honours Degree									
1		Multidisciplinary Project (Capstone Design Project-Level-III)	EE	12	0	0	12	6	4,8,9, 11,12
(or)									
1		Honours Elective – V	PE	4	2	0	2	3	
2		Honours Elective – VI	PE	4	2	0	2	3	
For Minor Degree									
1		Minor Elective – V	PC	3	3	0	0	3	
2		Minor Elective – VI	PC	3	3	0	0	3	

Semester VIII

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Practical Course									
1	CS26811	Project Work	EE	16	0	0	16	8	4,8,9
TOTAL				16	0	0	16	8	

CREDIT DISTRIBUTION

S.No	Subject Area	Credit Per Semester								Credits Total	Percentage
	Semester	I	II	III	IV	V	VI	VII	VIII		
1	Humanities and Social Science (HS)	3	6	0	0	0	3	3	0	15	9.09%
2	Basic Science (BS)	7	7	4	4	0	0	0	0	22	13.33%
3	Engineering Science (ES)	9	5	3	0	0	0	0	0	17	10.30%
4	Employability Enhancement (EE)	1	1	2	2	1	2	6	8	23	13.93%
5	Open Elective (OE)	0	0	0	3	3	3	0	0	9	5.45%
6	Professional Course (PC)	0	4	13	12	10	9	8	0	56	33.93%
7	Professional Elective (PE)	0	0	0	3	9	3	3	0	18	10.9%
8	Mandatory Course (MC)	1	1	2	1	0	0	0	0	5	3.03%
9	Audit Course (AC)	0	0	0	0	0	0	0	0	0	0.00%
Total		21	24	24	25	23	20	20	8	165	100%

PROFESSIONAL ELECTIVE STREAMS

Data Analytics	Cloud Computing	Cyber Physical Systems	Emerging Technologies	Intelligent Communications	Internet of Things and Smart Applications
Natural Language Processing	Cloud Architecture	Fundamentals of IoT	Augmented Reality/Virtual Reality	5G Communication Networks	Dynamic Paradigm for IoT
Text and Speech Analysis	Security and Privacy in Cloud	Autonomous Drones	Blockchain Technologies	Software Defined Networks	Smart IoT Architecture
Image and Video Analytics	Virtualization	Cyber Threat Intelligence	Vibe Coding	Intelligent Transportation Systems	Wearable Computing
Big Data Analytics	Edge and Fog Computing	AI for Cyber Security	E-Commerce and IT Project Management	Massive MIMO Networks	IoT in 5G Networks
Generative AI	Quantum Computing	Malware Analysis and Mitigation Techniques	UI/UX Design and Human centered Design	Remote Sensing and Navigational Systems	IoT and Smart Cities
Advanced SQL and Database Analytics	Cloud Computing for Data Analytics	Embedded Systems and Design	Emerging Digital Technologies	Underwater Wireless Communication	IoT Data Analytics
Advanced Machine Learning	Green Cloud Computing	Blockchain for CPS Security	DevOps and Cloud Automation	AI for Next Generation Networks	Industrial IoT and Industry 4.0

PROFESSIONAL ELECTIVE COURSES: VERTICALS

VERTICAL 1: DATA ANALYTICS

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	CS26DA1	NATURAL LANGUAGE PROCESSING	PE	4	2	0	2	3	4,9,10,16
2	CS26DA2	TEXT AND SPEECH ANALYSIS	PE	4	2	0	2	3	4,8,9
3	CS26DA3	IMAGE AND VIDEO ANALYTICS	PE	4	2	0	2	3	3,9,11
4	CS26DA4	BIG DATA ANALYTICS	PE	4	2	0	2	3	4,8,9
5	CS26DA5	GENERATIVE AI	PE	4	2	0	2	3	4,8,9
6	CS26DA6	ADVANCED SQL AND DATABASE ANALYTICS	PE	4	2	0	2	3	4,8,9
7	CS26DA7	ADVANCED MACHINE LEARNING	PE	4	2	0	2	3	4,8,9

VERTICAL 2: CLOUD COMPUTING

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	CS26CC1	CLOUD ARCHITECTURE	PE	4	2	0	2	3	4,8,9
2	CS26CC2	SECURITY AND PRIVACY IN CLOUD	PE	4	2	0	2	3	4,8,9
3	CS26CC3	VIRTUALIZATION	PE	4	2	0	2	3	4,8,9
4	CS26CC4	EDGE AND FOG COMPUTING	PE	4	2	0	2	3	4,8,9
5	CS26CC5	QUANTUM COMPUTING	PE	4	2	0	2	3	4,9
6	CS26CC6	CLOUD COMPUTING FOR DATA ANALYTICS	PE	4	2	0	2	3	4,8,9
7	CS26CC7	GREEN CLOUD COMPUTING	PE	4	2	0	2	3	4,8,9

VERTICAL 3: CYBER PHYSICAL SYSTEMS

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	CS26CP1	FUNDAMENTALS OF IOT	PE	4	2	0	2	3	4,8,9
2	CS26CP2	AUTONOMOUS DRONES	PE	4	2	0	2	3	4,8,9
3	CS26CP3	CYBERTHREAT INTELLIGENCE	PE	4	2	0	2	3	4,8,9
4	CS26CP4	AI FOR CYBER SECURITY	PE	4	2	0	2	3	4,8,9
5	CS26CP5	MALWARE ANALYSIS AND MITIGATION TECHNIQUES	PE	4	2	0	2	3	4,8,9
6	CS26CP6	EMBEDDED SYSTEMS AND DESIGN	PE	4	2	0	2	3	4,8,9
7	CS26CP7	BLOCKCHAIN FOR CPS SECURITY	PE	4	2	0	2	3	4,8,9

VERTICAL 4: EMERGING TECHNOLOGIES

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	CS26ET1	AUGMENTED REALITY /VIRTUAL REALITY	PE	4	2	0	2	3	4,8,9
2	CS26ET2	BLOCKCHAIN TECHNOLOGIES	PE	4	2	0	2	3	4,8,16
3	CS26ET3	VIBE CODING	PE	4	2	0	2	3	4,8,9
4	CS26ET4	E-COMMERCE AND IT PROJECT MANAGEMENT	PE	4	2	0	2	3	4,8,9
5	CS26ET5	UI/UX DESIGN AND HUMAN CENTRED DESIGN	PE	4	2	0	2	3	4,9,10
6	CS26ET6	EMERGING DIGITAL TECHNOLOGIES	PE	4	2	0	2	3	4,8,9
7	CS26ET7	DEVOPS AND CLOUD AUTOMATION	PE	4	2	0	2	3	4,8,9

VERTICAL 5: INTELLIGENT COMMUNICATIONS

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	CS26IC1	5G COMMUNICATION NETWORKS	PE	4	2	0	2	3	4,8,9
2	CS26IC2	SOFTWARE DEFINED NETWORKS	PE	4	2	0	2	3	4,8,9
3	CS26IC3	INTELLIGENT TRANSPORTATION SYSTEMS	PE	4	2	0	2	3	4,8,9
4	CS26IC4	MASSIVE MIMO NETWORKS	PE	4	2	0	2	3	4,8,9
5	CS26IC5	REMOTE SENSING AND NAVIGATIONAL SYSTEMS	PE	4	2	0	2	3	4,8,9
6	CS26IC6	UNDERWATER WIRELESS COMMUNICATION	PE	4	2	0	2	3	4,8,9
7	CS26IC7	AI FOR NEXT GENERATION NETWORKS	PE	4	2	0	2	3	4,8,9

VERTICAL 6: INTERNET OF THINGS AND SMART APPLICATIONS

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	CS26IS1	DYNAMIC PARADIGM FOR IOT	PE	4	2	0	2	3	4,8,9
2	CS26IS2	SMART IOT ARCHITECTURE	PE	4	2	0	2	3	7,9,11,13
3	CS26IS3	WEARABLE COMPUTING	PE	4	2	0	2	3	4,8,9
4	CS26IS4	IOT IN 5G NETWORKS	PE	4	2	0	2	3	7,9,11,13
5	CS26IS5	IOT AND SMART CITIES	PE	4	2	0	2	3	9,11
6	CS26IS6	IOT DATA ANALYTICS	PE	4	2	0	2	3	9,12
7	CS26IS7	INDUSTRIAL IOT AND INDUSTRY 4.0	PE	4	2	0	2	3	9,12

LIST OF OPEN ELECTIVES

OPEN ELECTIVE – I, II AND III

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	OE26C01	Environment and social impact Assessment	OE	3	3	0	0	3	11,13,15
2	OE26C02	Data Communication	OE	3	3	0	0	3	9,17
3	OE26C03	Renewable energy Systems	OE	3	3	0	0	3	7,9,13
4	OE26C04	E-Vehicle	OE	3	3	0	0	3	7,11,13
5	OE26C05	Holistic Nutrition	OE	3	3	0	0	3	2,3
6	OE26C06	NGOs and Sustainable Development	OE	3	3	0	0	3	1,10,17
7	OE26C07	Fundamentals of Quantum Electronics	OE	3	3	0	0	3	4,9
8	OE26C08	Biotechnology in Health Care	OE	3	3	0	0	3	3,9
9	OE26C09	Space Science	OE	3	3	0	0	3	4,9,13
10	OE26C10	Introduction to Industrial Engineering	OE	3	3	0	0	3	8,9,12
11	OE26C11	Food, Nutrition and Health	OE	3	3	0	0	3	2,3
12	OE26C12	Introduction to Industrial Instrumentation and control	OE	3	3	0	0	3	9,12
13	OE26C13	Graph Theory	OE	3	3	0	0	3	4,9
14	OE26C14	IT in Agricultural Systems	OE	3	3	0	0	3	2,9,15
15	OE26C15	Digital Payment Systems	OE	3	3	0	0	3	8,9,10
16	OE26C16	Project Report Writing	OE	3	3	0	0	3	4
17	OE26C17	English for Competitive Examinations	OE	3	3	0	0	3	4,8
18	OE26C18	Fundamentals of Aeronautical Engineering	OE	3	3	0	0	3	9,11
19	OE26C19	Life Style Diseases	OE	3	3	0	0	3	3
20	OE26C20	Operations Research	OE	3	3	0	0	3	8,9,12
21	OE26C21	Cost Management of Engineering Projects	OE	3	3	0	0	3	8,9,12
22	OE26C22	Industrial Nano technology	OE	3	3	0	0	3	3,9
23	OE26C23	Resource Management Techniques	OE	3	3	0	0	3	6,12,13
24	OE26C24	Fintech Regulation	OE	3	3	0	0	3	8,9,16
25	OE26C25	Introduction to Control Engineering	OE	3	3	0	0	3	9,12
26	OE26C26	Pharmaceutical Nanotechnology	OE	3	3	0	0	3	3,9
27	OE26C27	Aviation Management	OE	3	3	0	0	3	8,9,11
28	OE26C28	AI for Business and Society	OE	3	3	0	0	3	8,9,16
29	OE26C29	Soft Computing	OE	3	3	0	0	3	4,9
30	OE26C30	Cyber Loss and Digital Forensics	OE	3	3	0	0	3	9,16

MANAGEMENT COURSE ELECTIVE

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	HS26601	PRINCIPLES OF MANAGEMENT	HS	3	3	0	0	3	8,9
2	HS26602	TOTAL QUALITY MANAGEMENT	HS	3	3	0	0	3	9,12
3	HS26603	STRATEGIC MANAGEMENT	HS	3	3	0	0	3	8,12,17
4	HS26610	SOFTWARE PROJECT MANAGEMENT	HS	3	3	0	0	3	8,9
5	HS26608	SUPPLY CHAIN MANAGEMENT	HS	3	3	0	0	3	8,9,12,13
6	HS26611	ESSENTIALS OF FINANCIAL MANAGEMENT	HS	3	3	0	0	3	8,9

ENROLLMENT FOR B.E. (HONOURS) / MINOR DEGREE (OPTIONAL)

A student can also optionally register for additional courses (18 credits) and become eligible for the award of B.E. / B. Tech. (Honours) or Minor Degree.

For B.E. / B. Tech. (Honours), a student shall register for the additional courses (18 credits) from semester V onwards. These courses shall be from the same vertical or a combination of different verticals of the same programme of study only.

For minor degree, a student shall register for the additional courses (18 credits) from semester V onwards. All these courses have to be in a particular vertical from any one of the other programmes, Moreover, for minor degree the student can register for courses from any one of the following verticals also.

VERTICALS FOR MINOR DEGREE (In addition to all the verticals of other programmes)

Minor(additional 18 credits)-Students can opt for a “Minor Degree” in other discipline credits in addition to the minimum credit requirement of the Undergraduate degree of the courses listed in the Minor options.

S.NO.	MINOR DEGREE: COMPUTING TECHNOLOGIES
1	THEORETICAL COMPUTER SCIENCE & ALGORITHMS
2	DATA SCIENCE & ANALYTICS
3	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
4	CLOUD COMPUTING & INTERNET OF THINGS
5	FULL STACK WEB & MOBILE DEVELOPMENT
6	CYBERSECURITY & ETHICAL HACKING
7	BASICS OF PROMPT ENGINEERING
8	DEEP LEARNING ESSENTIALS

VERTICAL: COMPUTING TECHNOLOGIES

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	CS26CT01	THEORETICAL COMPUTER SCIENCE & ALGORITHMS	PC	3	3	0	0	3	4,8,9
2	CS26CT02	DATA SCIENCE & ANALYTICS	PC	3	3	0	0	3	9,11
3	CS26CT03	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	PC	3	3	0	0	3	4,8,9
4	CS26CT04	CLOUD COMPUTING & INTERNET OF THINGS	PC	3	3	0	0	3	4,8,9
5	CS26CT05	FULL STACK WEB & MOBILE DEVELOPMENT	PC	3	3	0	0	3	4,8,9
6	CS26CT06	CYBERSECURITY & ETHICAL HACKING	PC	3	3	0	0	3	4,8,9
7	CS26CT07	BASICS OF PROMPT ENGINEERING	PC	3	3	0	0	3	4,8,9
8	CS26CT08	DEEP LEARNING ESSENTIALS	PC	3	3	0	0	3	3,8,9

BoS Chairman/CSE

Chairman
Board of Studies
Department of Computer Science and Engineering
Kingston Engineering College
Vellore - 632 059

PRINCIPAL

Kingston Engineering College
Chittoor Main Road, Vellore - 632 059.
Phone : 0416-2298300



KINGSTON ENGINEERING COLLEGE

(An Autonomous Institution)

**(Approved by AICTE & COA, New Delhi, Affiliated to Anna University, Chennai)
Chittoor Main Road, Christianpet,
Katpadi, Vellore-632059**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

AUTONOMOUS CURRICULUM

REGULATION 2026

Academic Year 2026-27 onwards



INSTITUTE VISION

To be a pioneer in engineering and management education by providing amicable ambience and being a centre for learning thereby perpetuating versatile professionals in engineering and management suitable for industry, higher education and research.

INSTITUTE MISSION

- Developing, nurturing and building professionals with technical, research and managerial expertise, intellectual proficiency, right attitude and moral ethics.
- Building infrastructure that earmarks the institution to be the most preferred educational destination and provides the right ambience for creative and innovative teaching - learning process.
- Enabling learners to broaden their horizon and helping to meet global challenges.

QUALITY POLICY

To establish and implement a robust quality system at Kingston Engineering College, encircling teaching, learning, research, and self-reliance, focusing on core and support functions to ensure accountability to stakeholders through continuous improvement and sustenance towards promoting holistic academic excellence.

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**B.E - COMPUTER SCIENCE AND ENGINEERING(AIML)
REGULATION 2026
CHOICE BASED CREDIT SYSTEM**

VISION:

To promote highly ethical and innovative computer professionals and AI through excellence in teaching, training and research.

MISSION:

- To produce globally competent professionals, motivated to learn the emerging technologies in Artificial Intelligence and Machine Learning and to be innovative in solving real world problems.
- To promote research activities amongst the students and the members of faculty that could benefit the society.
- To impart moral and ethical values in their profession.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: To apply their technical competence in computer science to solve real world problems, with technical and people leadership.

PEO 2: To conduct cutting edge research and develop solutions on problems of social relevance.

PEO 3: To encourage the research abilities and innovative project development in the field of Artificial Intelligence, machine learning, networking, security, data mining, web technology, mobile communication and also emerging technologies for the cause of social benefit.

PEO 4: To develop professionally in a business environment, exhibiting team skills, work ethics, adaptability and lifelong learning.

PROGRAMME OUTCOMES (POs)

[PO1] Engineering Knowledge: Apply math, science, and engineering fundamentals to complex problems.

[PO2] Problem Analysis: Identify and analyze complex problems using research and sustainability principles.

[PO3] Design Solutions: Design systems and processes considering health, safety, cost, culture, and environment.

[PO4] Investigations: Use experiments, modelling, and data analysis to reach valid conclusions.

[PO5] Engineering Tools: Apply modern tools for modelling and problem-solving, recognizing their limits.

[PO6] Society & Environment: Assess societal, legal, and environmental impacts of engineering solutions.

- [PO7] Ethics:** Commit to ethics, human values, diversity, and legal compliance.
- [PO8] Teamwork:** Work effectively as an individual and in multidisciplinary teams.
- [PO9] Communication:** Communicate clearly in reports, presentations, and documentation across diverse groups.
- [PO10] Management & Finance:** Apply management and economic principles in projects and teamwork.
- [PO11] Lifelong Learning:** Engage in continuous learning, adapt to new technologies, and think critically.

PROGRAM SPECIFIC OUTCOMES (PSOs)

A graduate of the Computer Science and Engineering Program will demonstrate,

PSO1: Design and develop intelligent computing solutions by applying AI and machine learning techniques to solve real-world problems.

PSO2: Employ modern AI tools, frameworks, and innovative methods to analyze data, build predictive models, and deliver effective solutions for industrial and societal applications.

PSO3: Enhance competence in advancements in AI and ML, engage in responsible research, and uphold ethical and professional standards in developing intelligent systems.

MAPPING OF PROGRAM EDUCATIONAL OBJECTIVES WITH PROGRAM OUTCOMES

A broad relation between the program educational objective and the program outcomes is given in the following table

PEOs / POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO 11
PEO1	3	3	2	2	3	-	-	-	2	2	2
PEO2	2	2	3	1	3	-	-	-	2	2	2
PEO3	2	3	3	3	3	3	2	2	2	2	3
PEO4	2	2	2	2	2	2	2	3	3	3	3

1 - Low, 2 - Medium, 3 - High, '-' - No Correlation

MAPPING OF PROGRAM EDUCATIONAL OBJECTIVES WITH PROGRAM SPECIFIC OUTCOMES

A broad relation between the program educational objectives and the program specific outcomes is given in the following table.

PEOs / PSOs	PSO1	PSO2	PSO3
PEO1	2	2	2
PEO2	3	3	2
PEO3	3	3	3
PEO4	2	2	3

1 - Low, 2 - Medium, 3 - High, '-' - No Correlation

SUSTAINABLE DEVELOPMENT GOALS (SDG)





(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE & COA, New Delhi, Affiliated to Anna University, Chennai,
Accredited with 'A' Grade by NAAC)

**B.E-COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND
MACHINE LEARNING)
REGULATION 2026
CURRICULUM SEMESTER I to VIII
CHOICE BASED CREDIT SYSTEM
(For the Students admitted from the Academic Year 2026-27)**

Semester I									
S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	HS26101	Heritage of Tamil	HS	1	1	0	0	1	4,11,17
2	MA26101	Matrices and Calculus	BS	4	3	1	0	4	4,9, 11, 12
Lab Integrated Theory Course									
3	HS26102	English for Interpersonal Communication-I	HS	3	1	0	2	2	4, 8,16
4	EC26C01	Digital Principles and System Design	ES	5	3	0	2	4	7,9,11,12
5	CS26C01	Programming in C	ES	5	3	0	2	4	4, 8, 9
6	CH26C01	Chemistry for Engineers	BS	4	2	0	2	3	6,7, 9, 12, 13
Practical Course									
7	ME26C11	Engineering Foundation Laboratory (Mech)	ES	2	0	0	2	1	4, 8, 9, 12
Employability Enhancement Course									
8	PD26S01	Digital Professional Skills	EE	2	0	0	2	1	4, 8, 9
Mandatory Course									
9	MC26101	Student Induction Program	MC	3 weeks	0	0	0	0	4
10	MC26102	Foreign Language - Level I (Japanese/German)	MC	2	0	0	2	1	4,8, 17
11	MC26103	Physical Education I	MC	2	0	0	2	0	3,4,5
Audit Course									
12	AC26101	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week	-	-	-	0	3, 11, 17
TOTAL				30	13	1	16	21	-

Semester II									
S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	HS26201	Tamil and Technology	HS	1	1	0	0	1	11
2	MA26201	Linear Algebra	BS	4	3	1	0	4	4,8,9
3	HS26202	Universal Human Values-II: Understanding Harmony	HS	3	3	0	0	3	3, 4, 16
Lab Integrated Theory Course									
4	HS26203	English for Interpersonal Communication-II	HS	3	1	0	2	2	4,8,9
5	CS26201	Data Structures	ES	5	3	0	2	4	4, 8, 9
6	CS26C02	Python Programming	ES	5	3	0	2	4	4, 8, 9
7	PH26C01	Physics for Computer Science	BS	4	2	0	2	3	7, 8, 9,12
Practical Course									
8	CS26C11	Engineering Foundation Laboratory (CSE and ECE)	ES	2	0	0	2	1	4, 8, 9, 12
Employability Enhancement Course									
9	PD26S02	Professional Excellence and Career Development	EE	2	0	0	2	1	3, 4, 8, 16
Mandatory Course									
10	MC26201	Foreign Language - Level II (Japanese/German)	MC	2	0	0	2	1	4,8, 17
11	MC26202	Physical Education II	MC	2	0	0	2	0	3,4,5
Audit Course									
12	AC26201	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week	-	-	-	0	3, 11, 17
TOTAL				33	16	1	16	24	-

Semester III									
S. NO.	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	MA26C01	Discrete Mathematics	BS	4	3	1	0	4	4,9,11,12,16
2	CS26301	Operating Systems	PC	4	3	1	0	4	4,8,9
Lab Integrated Theory Course									
3	CS26302	Programming in Java	PC	5	3	0	2	4	4,8,9
4	CS26303	Algorithms	PC	5	3	0	2	4	4,8,9
5	AM26304	Design thinking and Idea Innovation	ES	4	2	0	2	3	4,8,9,11,12,17
Practical Course									
6	CS26311	Operating Systems Laboratory	PC	2	0	0	2	1	4,8,9
Employability Enhancement Course									
7	AM26S01	Employability Enhancement Skill – I	EE	2	0	0	2	1	4,8
8	AM26S02	Industry Certification Course-I	EE	2	0	0	2	1	
Mandatory Course									
9	MC26301	Environmental and Sustainable Future	MC	1	1	0	0	1	11,12,13
10	MC26302	Foreign Language - Level III (Japanese/German)	MC	2	0	0	2	1	4,8,17
Audit Course									
11	AC26301	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week	-	-	-	0	3,11,17
TOTAL				31	15	2	14	24	

Semester IV									
S. NO.	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	MA26C02	Probability and Statistics	BS	4	3	1	0	4	3,4,8,9,13
2		Open Elective – I	OE	3	3	0	0	3	-
Lab Integrated Theory Course									
3	CS26401	Database Management Systems	PC	4	2	0	2	3	4,8,9
4	AM26401	Foundations of Data Science	PC	5	3	0	2	4	4,8,9,11
5	AM26402	Artificial Intelligence	PC	4	2	0	2	3	4,8,9
6		Professional Elective – I	PE	4	2	0	2	3	
Practical Course									
7	AM26411	Innovation Design Laboratory	PC	4	0	0	4	2	4,9
Employability Enhancement Course									
8	AM26S03	Employability Enhancement Skill – II	EE	2	0	0	2	1	4,8
9	AM26S04	Industry Oriented Course-I	EE	2	0	0	2	1	
Mandatory Course									
10	MC26401	Foreign Language - Level IV (Japanese/German)	MC	2	0	0	2	1	4,8, 17
11	MC26402	Indian Constitution	MC	1	1	0	0	0	4,16
Audit Course									
12	AC26401	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 Week	-	-	-	0	3,11, 17
TOTAL				35	16	1	18	25	

Semester V									
S. NO	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	AM26501	Machine Learning	PC	4	3	1	0	4	4,8,9
2		Open Elective – II	OE	3	3	0	0	3	-
Lab Integrated Theory Course									
3	AM26502	Big Data Analytics	PC	6	4	0	2	4	4,8,9,11,12
4		Professional Elective –II	PE	4	2	0	2	3	
5		Professional Elective –III	PE	4	2	0	2	3	
6		Professional Elective – IV	PE	4	2	0	2	3	
Practical Course									
7	AM26511	Machine Learning Lab	PC	2	0	0	2	1	4,8,9
8	AM26512	Innovation Product Development-I Laboratory	PC	2	0	0	2	1	4,8,9
Employability Enhancement Course									
9	AM26S05	Career Readiness – I	EE	2	0	0	2	1	4,8
Mandatory Course									
10	MC26501	Disaster Management	MC	1	1	0	0	0	12,13
Audit Course									
11	AC26501	NSS/YRC/SDG/CLUB ACTIVITIES	AC	1 WEEK				0	3,11,17
TOTAL				32	17	1	14	23	
For Honours Degree									
1		Multidisciplinary Project (Capstone Design Project-Level-I)	EE	12	0	0	12	6	4,8,9,11,12,13
(or)									
1		Honours Elective – I	PE	4	2	0	2	3	
2		Honours Elective – II	PE	4	2	0	2	3	
For Minor Degree									
1		Minor Elective – I	PC	3	3	0	0	3	
2		Minor Elective – II	PC	3	3	0	0	3	

Semester VI									
S. NO	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1		Management Elective	HS	3	3	0	0	3	4,8,9
2	AM26601	Large Language Models	PC	4	3	1	0	4	4,8,9,10
3		Open Elective – III	OE	3	3	0	0	3	-
Lab Integrated Theory Course									
4	AM26602	Neural Networks and Deep Learning	PC	4	2	0	2	3	3,8,9
5		Professional Elective – V	PE	4	2	0	2	3	
Practical Course									
6	AM26611	Innovation Product Development-II Laboratory	PC	4	0	0	4	2	4,8,9, 12
Employability Enhancement Course									
7	AM26S06	Career Readiness – II	EE	2	0	0	2	1	4,8
8	AM26S07	Industry-Oriented Course-II	EE	2	0	0	2	1	
Mandatory Course									
9	MC26601	Introduction to Indian Knowledge System	MC	1	1	0	0	0	4,11,12
Audit Course									
10	AC26601	NSS/YRC/SDG/ Club Activity	AC	1 WEEK				0	3,11, 17
TOTAL				27	14	1	12	20	
For Honours Degree									
1		Multidisciplinary Project (Capstone Design Project- Level-II)	EE	12	0	0	12	6	4,8,9, 11,12
(or)									
1		Honours Elective – III	PE	4	2	0	2	3	
2		Honours Elective – IV	PE	4	2	0	2	3	
For Minor Degree									
1		Minor Elective – III	PC	3	3	0	0	3	
2		Minor Elective – IV	PC	3	3	0	0	3	

Semester VII									
S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Theory Course									
1	HS26701	Research and Publication Ethics	HS	3	2	1	0	3	4,9,16
2	AM26701	Cloud Computing Techniques	PC	3	3	0	0	3	8,9,12
Lab Integrated Theory Course									
3	AM26702	Ethical hacking and Penetration Techniques	PC	4	2	0	2	3	4,8,9, 11,12
4		Professional Elective – VI	PE	4	2	0	2	3	
Practical Course									
5	AM26711	Mini Project	EE	4	0	0	4	2	8,9,11
6	AM26712	Internship	EE	4 Weeks	-	-	-	2	
7	AM26713	Cloud Computing Techniques Laboratory	PC	3	0	0	3	2	8,9,12
Employability Enhancement Course									
8	AM26S08	Industry Readiness and Professional Excellence	EE	2	0	0	2	1	4,8,9,12
9	AM26S09	Industry Certification Course-II	EE	2	0	0	2	1	-
TOTAL				25	09	1	15	20	
For Honours Degree									
1		Multidisciplinary Project (Capstone Design Project-Level-III)	EE	12	0	0	12	6	4,8,9, 11,12
(or)									
1		Honours Elective – V	PE	4	2	0	2	3	
2		Honours Elective – VI	PE	4	2	0	2	3	
For Minor Degree									
1		Minor Elective – V	PC	3	3	0	0	3	
2		Minor Elective – VI	PC	3	3	0	0	3	

Semester VIII									
S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
Practical Course									
1	AM26811	Project Work	EE	16	0	0	16	8	4,8,9
TOTAL				16	0	0	16	8	

CREDIT DISTRIBUTION

S. No	Subject Area	Credit Per Semester								Credits Total	Percentage
	Semester	I	II	III	IV	V	VI	VII	VIII		
1	Humanities and Social Science (HS)	3	6	3	0	0	3	3	0	18	10.91%
2	Basic Science (BS)	7	7	4	4	0	0	0	0	22	13.33%
3	Engineering Science (ES)	9	5	0	0	0	0	0	0	14	8.48%
4	Employability Enhancement (EE)	1	1	2	2	2	2	6	8	24	14.55%
5	Open Elective (OE)	0	0	0	3	3	3	0	0	9	5.45%
6	Professional Course (PC)	0	4	13	12	9	9	8	0	55	33.33%
7	Professional Elective (PE)	0	0	0	3	9	3	3	0	18	10.91%
8	Mandatory Course (MC)	1	1	2	1	0	0	0	0	5	3.03%
9	Audit Course (AC)	0	0	0	0	0	0	0	0	0	0.00%
Total		21	24	24	25	23	20	20	8	165	100%

PROFESSIONAL ELECTIVE STREAMS

Computing	Product Development	Cloud services and Online Security	Applied data Science	Next Gen Technologies	Internet of Things and Smart Applications
Distributed Computing	UI and UX Design and Human centered Design	Serverless Computing and Edge Integration	Robotic Process Automation	Software Defined Networks	Dynamic Paradigm for IoT
Cloud Architecture	Java Spring boot	Ethical and Legal Implications of AI	Recommender Systems	Generative AI and Prompt Engineering	Smart IoT Architecture
Augmented Reality/ Virtual Reality	MLOps	IoT in Healthcare	Digital Imaging and Computer Vision	Wearable Computing	Wearable Computing
Edge and Fog Computing	Vibe Coding	AI based Green Computing and Sustainable Technologies	Emotion and Sentiment Analysis	Agentic AI	IoT in 5G Networks
Granular Computing	AutoML and Intelligent Model Selection	Cryptocurrency and Blockchain Technologies	Reinforcement Learning	AI-Driven Product Engineering	IoT and Smart Cities
Quantum Computing	DevOps and Automation	Cyber Threat Intelligence	Optimization Techniques in Data Science	AI for Next Generation Networks	Industrial IoT and Edge Intelligence

PROFESSIONAL ELECTIVE COURSES: VERTICALS

VERTICAL 1: COMPUTING

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	AM26CG1	Distributed Computing	PE	4	2	0	2	3	4,8,9
2	AM26CG2	Cloud Architecture	PE	4	2	0	2	3	4,8,9
3	AM26CG3	Augmented Reality/ Virtual Reality	PE	4	2	0	2	3	4,8,9
4	AM26CG4	Edge and Fog Computing	PE	4	2	0	2	3	4,8,9
5	AM26CG5	Granular Computing	PE	4	2	0	2	3	4,8,9
6	AM26CG6	Quantum Computing	PE	4	2	0	2	3	4,9

VERTICAL 2: PRODUCT DEVELOPMENT

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	AM26PD1	UI and UX Design and Human Centered Design	PE	4	2	0	2	3	4,9,10
2	AM26PD2	Java Spring Boot	PE	4	2	0	2	3	4,8,9
3	AM26PD3	MLOPs	PE	4	2	0	2	3	8,12
4	AM26PD4	Vibe Coding	PE	4	2	0	2	3	4,8,9
5	AM26PD5	AutoML and Intelligent Model Selection	PE	4	2	0	2	3	4,8,9
6	AM26PD6	DevOps and Automation	PE	4	2	0	2	3	8,9,12

VERTICAL 3: CLOUD SERVICES AND ONLINE SECURITY

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	AM26CO1	Serverless Computing and Edge Integration	PE	4	2	0	2	3	4,8,9
2	AM26CO2	Ethical and Legal Implications of AI	PE	4	2	0	2	3	4,8,9
3	AM26CO3	IoT In Healthcare	PE	4	2	0	2	3	4,8,9
4	AM26CO4	AI Based Green Computing and Sustainable Technologies	PE	4	2	0	2	3	4,8,9
5	AM26CO5	Cryptocurrency and Blockchain Technologies	PE	4	2	0	2	3	4,8,9
6	AM26CO6	Cyber Threat Intelligence	PE	4	2	0	2	3	4,8,9

VERTICAL 4: APPLIED DATA SCIENCE

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	AM26AD1	Robotic Process Automation	PE	4	2	0	2	3	8,9,12
2	AM26AD2	Recommender Systems	PE	4	2	0	2	3	4,8,9
3	AM26AD3	Digital Imaging and Computer Vision	PE	4	2	0	2	3	4,8,9
4	AM26AD4	Emotion and Sentiment Analysis	PE	4	2	0	2	3	4,8,9
5	AM26AD5	Reinforcement Learning	PE	4	2	0	2	3	4,8,9
6	AM26AD6	Optimization Techniques in Data Science	PE	4	2	0	2	3	4,8,9

VERTICAL 5: NEXT GEN TECHNOLOGIES

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	AM26NT1	Software Defined Networks	PE	4	2	0	2	3	4,8,9
2	AM26NT2	Generative AI and Prompt Engineering	PE	4	2	0	2	3	4,8,9
3	AM26NT3	Wearable Computing	PE	4	2	0	2	3	4,8,9
4	AM26NT4	Agentic AI	PE	4	2	0	2	3	4,8,9
5	AM26NT5	AI-Driven Product Engineering	PE	4	2	0	2	3	4,8,9
6	AM26NT6	AI for Next Generation Networks	PE	4	2	0	2	3	4,8,9

VERTICAL 6: INTERNET OF THINGS AND SMART APPLICATIONS

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	AM26IS1	Dynamic Paradigm for IoT	PE	4	2	0	2	3	4,8,9.
2	AM26IS2	Smart IoT Architecture	PE	4	2	0	2	3	7,9,11,13
3	AM26IS3	Wearable Computing	PE	4	2	0	2	3	4,8,9
4	AM26IS4	IoT in 5G Networks	PE	4	2	0	2	3	7,9,11,13
5	AM26IS5	IoT and Smart Cities	PE	4	2	0	2	3	9,11
6	AM26IS6	Industrial IoT and Edge Intelligence	PE	4	2	0	2	3	9,12

LIST OF OPEN ELECTIVES
OPEN ELECTIVE – I, II AND III

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	OE26C01	Environment and social impact Assessment	OE	3	3	0	0	3	11,13, 15
2	OE26C02	Data Communication	OE	3	3	0	0	3	9,17
3	OE26C03	Renewable energy Systems	OE	3	3	0	0	3	7,9,13
4	OE26C04	E-Vehicle	OE	3	3	0	0	3	7,11, 13
5	OE26C05	Holistic Nutrition	OE	3	3	0	0	3	2,3
6	OE26C06	NGOs and Sustainable Development	OE	3	3	0	0	3	1,10, 17
7	OE26C07	Fundamentals of Quantum Electronics	OE	3	3	0	0	3	4,9
8	OE26C08	Biotechnology in Health Care	OE	3	3	0	0	3	3,9
9	OE26C09	Space Science	OE	3	3	0	0	3	4,9, 13
10	OE26C10	Introduction to Industrial Engineering	OE	3	3	0	0	3	8,9, 12
11	OE26C11	Food, Nutrition and Health	OE	3	3	0	0	3	2,3
12	OE26C12	Introduction to Industrial Instrumentation and control	OE	3	3	0	0	3	9,12
13	OE26C13	Graph Theory	OE	3	3	0	0	3	4,9
14	OE26C14	IT in Agricultural Systems	OE	3	3	0	0	3	2,9,15,
15	OE26C15	Digital Payment Systems	OE	3	3	0	0	3	8,9, 10
16	OE26C16	Project Report Writing	OE	3	3	0	0	3	4
17	OE26C17	English for Competitive Examinations	OE	3	3	0	0	3	4,8
18	OE26C18	Fundamentals of Aeronautical Engineering	OE	3	3	0	0	3	9,11
19	OE26C19	Life Style Diseases	OE	3	3	0	0	3	3
20	OE26C20	Operations Research	OE	3	3	0	0	3	8,9, 12
21	OE26C21	Cost Management of Engineering Projects	OE	3	3	0	0	3	8,9, 12
22	OE26C22	Industrial Nano technology	OE	3	3	0	0	3	3,9

23	OE26C23	Resource Management Techniques	OE	3	3	0	0	3	6,12, 13
24	OE26C24	Fintech Regulation	OE	3	3	0	0	3	8,9, 16
25	OE26C25	Introduction to Control Engineering	OE	3	3	0	0	3	9,12
26	OE26C26	Pharmaceutical Nanotechnology	OE	3	3	0	0	3	3,9
27	OE26C27	Aviation Management	OE	3	3	0	0	3	8,9, 11
28	OE26C28	AI for Business and Society	OE	3	3	0	0	3	8,9, 16
29	OE26C29	Soft Computing	OE	3	3	0	0	3	4,9
30	OE26C30	Cyber Loss and Digital Forensics	OE	3	3	0	0	3	9,16

MANAGEMENT COURSE ELECTIVES

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	HS26601	Principles of Management	HS	3	3	0	0	3	8,9
2	HS26602	Total Quality Management	HS	3	3	0	0	3	9,12
3	HS26603	Strategic Management	HS	3	3	0	0	3	8,12,17
4	HS26608	Supply Chain Management	HS	3	3	0	0	3	8,9,12,13
5	HS26611	Essentials of Financial Management	HS	3	3	0	0	3	8,9
6	HS26610	Software Project Management	HS	3	3	0	0	3	8,9



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VERTICALS FOR MINOR DEGREE
(In addition to all the verticals of other programmes)

S.NO.	MINOR DEGREE: COMPUTING TECHNOLOGIES
1	Theoretical Computer Science and Algorithms
2	Data Science and Analytics
3	Artificial Intelligence and Machine Learning
4	Cloud Computing and Internet of Things
5	Full Stack Web and Mobile Development
6	Cybersecurity and Ethical Hacking
7	Basics of Prompt Engineering
8	Deep Learning Essentials

S. No	Course Code	Course Name	Course Type	Contact Periods	L	T	P	C	SDG
1	CS26CT01	Theoretical Computer Science and Algorithms	PC	3	3	0	0	3	4,8,9
2	CS26CT02	Data Science and Analytics	PC	3	3	0	0	3	4,8,9, 11
3	CS26CT03	Artificial Intelligence and Machine Learning	PC	3	3	0	0	3	4,8,9
4	CS26CT04	Cloud Computing and Internet of Things	PC	3	3	0	0	3	8,9,12
5	CS26CT05	Full Stack Web and Mobile Development	PC	3	3	0	0	3	4,8,9
6	CS26CT06	Cybersecurity and Ethical Hacking	PC	3	3	0	0	3	4,8,9
7	CS26CT07	Basics of Prompt Engineering	PC	3	3	0	0	3	4,8,9
8	CS26CT08	Deep Learning Essentials	PC	3	3	0	0	3	3,8,9

M. Sami
BoS Chairman / CSE (AIML)
Chairman

Board of Studies
Department of Computer Science and Engineering -
Artificial Intelligence and Machine Learning
Kingston Engineering College
B.E- CSE(AIML) Vellore - 632 059 R-2026 CURRICULUM

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