Supporting Documents for Qualitative Metric 1.1.1

Submitted to NAAC

By

Mohamed Sathak Engineering College (MSEC),Kilakarai, Ramanathapuram

1.1 Curriculum Planning and Implementation

1.1.1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

Mohamed Sathak Engineering College (MSEC) is approved by AICTE and affiliated to the Anna University, Chennai. MSEC is offering 13 UG Programs, 9 PG Programs in Engineering & Technology and a Research program in Science and Humanities.

The Institute follows the curriculum approved by the BoS of Anna University and implements the syllabus with course objectives and evaluation schemes for every course. Our faculty members also participate at various bodies of the University such as Academic Council, Board of Studies (BOS), and subject chairman who contribute in framing of syllabus regularly.

Institute has an **Academic Administration Committee** (AAC) comprising of Principal, Heads of the Department (HoD's) and Internal Quality Assurance Cell (IQAC) that are responsible for planning, monitoring and implementation of overall academic activities like preparation of timetable, identification of learning gaps, industry expectations, emerging skills, knowledge enhancement, faculty training and designing of new courses in this backdrop, planning and conduct of programs for curriculum enhancement. The Program coordinator monitors the conduct of the academics.

- **Academic calendar** is prepared to fulfill the objectives of the curriculum delivery. MSEC is affiliated to Anna University, T.N., and follows the curriculum prescribed by it. The Institution Academic Calendar is finalized in alignment with the University calendar. Based on Academic Advisory Committee inputs, Co-curricular and extra-curricular activities are planned in academic calendar. Each department prepares their own academic calendar in line with the institute academic calendar.
- **Annual Calendar of events** is prepared which consists of plan for Internships, Field tours and projects. Lectures are scheduled for connecting the requirements of industry and academics.
- Before the start of every academic session, Principal conducts meeting with Vice-Principal, Academic Dean, Heads of all the Departments, and finalize **Academic Policy** which covers following points:

  - **Teaching Load Distribution** (theory and practical) is appropriately allotted among the faculty members. **Competency mapping** is undertaken at department level to ensure that most suitable teachers handle the courses based on their specialization and experience.
  - **Time table** is prepared as per the teaching scheme of Anna University and as per department requirements by the Time-Table Committee. Time table is prepared at

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the Department level - teacher wise - class wise as a matrix structure. Students are made aware of commencement of semester through notice and SMS.

- **Preparation for Course Delivery: Teaching Plans** (Theory & Practical) and **Tutorial Plans** are prepared by the subject teachers before the start of every semester. **Lesson plan** is prepared by the subject teacher prior to the delivery of lecture, who also prepares the **lecture notes** for all topics in the curriculum and devise the **assignment topics** and **tutorial problems** and get the approval of the CC Head, HoD and Principal. Individual faculty uploads Unit-Wise Teaching Plan in college website and LMS before commencement of semester.
- **Course files** are prepared by all faculty members which include Syllabus, Academic calendar, Teaching Plan, Tutorial Plan, Program Outcomes, Program specific outcomes and Course Outcomes, CO-PO(s), CO-PSO(s) Mapping & Attainment, Tutorial Sheets, Class Assessment Tests (CAT) question Bank, Assignment Questions, University Question Papers & model solution, CAT & Sessional examination question papers, Support for Academically slow students etc.

Teaching Learning Process:

- Each department has its own Vision and Mission which matches with the Vision, Mission and Quality Policy of the Institution.
- PEOs, POs, PSOs and COs are defined for each Program.
- To complement the conventional teaching methods, the departments emphasize on following practices:
  1. Eminent Academicians and Industrial Experts are invited for delivering guest lectures on current trends in the subjects related to curriculum.
  2. The use of ICT enabled Class rooms for Video lectures of expert from QEEE, IITs and NPTEL.
  3. The college organised **7** certificate and **33** value-added courses in the last 5 years.
  4. Meeting with industry experts to understand the industry needs, visit to industry as Intern / project Trainee for practical exposure.
  5. Hackathons, Tech Fests, Seminars Workshops and Conferences are organized.
  6. Training of teachers for new courses through orientation programs STTP, FDP and online courses organised.
  7. Study groups for courses are formed for peer-to-peer learning.
  8. Group discussion/Technical quiz/Surprise test are conducted periodically.
  9. Classes are conducted for the improving employability and preparation of GATE/IES.

Action plan for ensuring effective curriculum delivery

- Effective implementation of curriculum is periodically monitored by departmental and academic administration committee. Progresses of the syllabus coverage and course delivery are obtained from the faculty through **Lesson plan Implementation Audit**.

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- Continuous academic monitoring is done through **academic review** which is taken every fortnightly. Dean Academics after reviewing the Academic report, communicates the discrepancies if found to Head of the department. HoD takes necessary action for the improvement.
- In addition to traditional teaching methods self learning through, interactive video lectures, NPTEL lectures, Faculty Power Point presentations, Student projects, case studies, etc are being conducted.
- Academic Audit is conducted at department and Institute level by IQAC to verify the content of course file, Evaluation Process and Laboratory Conduct.
- Academic feedback is taken from the students on the basis of various parameters to improve teaching learning process. Feedback is communicated to the concerned faculty for necessary corrective measures.
- The attainment of COs, POs and PSOs is calculated using direct and indirect assessment tools.
- Remedial classes are conducted for academically slow learners.
- Bridge Courses are offered for the Lateral Entry Students.
- For effective understanding of the course, ICT tools and other pedagogical practices are used.
- Based on Department Advisory Board (DAB) recommendations, Guest lectures, workshops, seminars, industrial visits, training programs related to subjects are organized for its effective understanding and attainment of PO's.
- Laboratories have standard operating procedure and slots to perform innovative experiments and additional experiments beyond syllabus.
- End of Course Survey is taken for every subject from the students to analyze their understanding of the subject. Students feedback about the portion coverage as per the lesson plan and suggestions for the improvement in teaching and learning process before and after each internal assessment test are addressed by the course handing faculty and Head of the Department in the class committee meeting .
- Evaluation and review based on results, feedback, placements at institutional, program and department level. External Audit is conducted once a year and action is taken to improve curriculum delivery.
- The college organizes workshops on the revised CBCS pattern syllabus and Faculty have attended the workshops on revised curriculum which elaborates depth and relevance of the curriculum. This helped the faculty to deliver the curriculum effectively.

Academic Calendar and conduct of CIE

The Anna University publishes an **Academic Calendar** for the programs well before the commencement of each semester. The University calendar portray important timelines like the

beginning of the semester, last working day, scheduled for summer project/professional training, schedule of practical and theory examinations and date of commencement of next semester.

The IQAC prepares the **Institute academic calendar** taking into consideration the guidelines issued by University which include all activities like the conduct of Continuous Internal Evaluation (CIE), End Semester Examination, Value added courses and Placement activities. Separate **Institute academic calendar** and **department event cum academic calendar** are prepared strictly complying with the university academic calendar accommodating all planned activities. While the institute calendar includes details like a total number of working days & holidays, CIE dates, institutes flagship programs, etc., the department calendar comprises about guest lectures, conferences, workshops, industrial visits, and other co-curricular & extra-curricular activities planned by respective departments.

The above academic calendars which are published in the prospectus and on the college notice boards and website help faculty members to plan their respective **course delivery** and undertake academic and other related activities. Head of the Department closely supervise and monitor completion of the syllabus as per the **lesson plan** prepared by faculty members. Portions for each CIE are decided well in advance and faculty members are required to stick to it.

Meeting of the **college academic committee** and **examination committee** is held between May to July as per the requirements and various plans like Academic Evaluation Plan, Finalization of the summer internship and projects with mentors, Implementation of Institutional Social Responsibility, Mentor and Mentee finalization, Identification and support for academically advance learners and slow learners, Bridge Courses/Remedial Courses and Field Visits/Live Projects are discussed and scheduled.

The CIE system comprises of 1. Preparation of Question paper and Scheme is based on percentage of syllabus coverage, CO's and Bloom Taxonomy levels by the respective faculty in conjunction with course co-ordinator. 2. Scrutiny and Approval of Question paper: is done by the Head of the Department. 3. Printed question papers in a sealed cover are handed over to the CIE co-ordinator for the smooth conduction of CIE.

Three internal assessment tests, assignments, slip tests, quizzes, and seminars are part of the Continuous Internal Evaluation (CIE) of students. The respective course instructors prepare sample **IA question papers based on the revised Bloom's taxonomy** and it will be reviewed and approved by the review committee within the department. The approved questions in the form of a databank are circulated with the students. The scheme of evaluation, internal assessment timetable prepared by the University will then be circulated to all faculty members and students. Students are informed about the evaluation methods and nature of question paper in the beginning of the academic sessions during orientation programs and at appropriate intervals in classes. Post evaluation of papers, calculation of CO-PO attainment are carried out by respective faculty members.

Laboratory work is assessed on continuous basis. Submission of laboratory observations, records, conduction of labs & viva forms major components of laboratory evaluation. As per the University guidelines, the internal test is conducted at the semester end. Continuous Internal Evaluation is spread across the entire semester ensuring the final CIE marks are made available much before the deadline. As the entire activities including CIE during the semester are pre-planned, the semester progresses smoothly as per the academic calendar.

The principal reviews the semester progress frequently and makes required interventions if any to adhere to the academic calendar. If there is any change as per the directive of the University, the institute will immediately make suitable amendments and the same would be followed by all concerned in the college.

1.1 Curricular Planning and Implantation

1.1.1 The institution ensures effective curriculum delivery through well planned and documented process.

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IQAC COORDINATOR

MOHAMED SATHAK ENGINEERING COLLEGE ★ KILAKARAI

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MOHAMED SATHAK ENGINEERING COLLEGE
KILAKARAI - 623 806.

Date: 04.03.2022

REVISED

CENTRE FOR ACADEMIC COURSES

ANNA UNIVERSITY: : CHENNAI – 600 025

ACADEMIC SCHEDULE FOR NON-AUTONOMOUS AFFILIATED COLLEGES

March 2022 – June 2022 (Even Semester – Except Semester II)

UG (FT/PT) Degree Programmes

Sl. No.	Programme	Semester	Commencement of Classes	Last working day	Commencement of Practical Examinations	Commencement of End Semester Examinations
1.	B.E. / B.Tech.(Full-Time)	IV,VI,VIII	16.03.2022	16.06.2022**	18.06.2022	28.06.2022
2.	B.E. / B.Tech (Part-Time)	IV,VI				
3.	B.Arch. (Full-Time)	IV,VI,VIII,X				

RE - OPENING DAY FOR THE NEXT SEMESTER: 10.08.2022 (Wednesday)

NOTE:

1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

** In order to ensure minimum no. of working days, the following Saturdays are declared as working days.

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
1.	19.03.2022	Tuesday
2.	26.03.2022	Wednesday
3.	09.04.2022	Thursday
4.	23.04.2022	Friday
5.	30.04.2022	Tuesday
6.	07.05.2022	Monday

Sl. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
7.	14.05.2022	Tuesday
8.	21.05.2022	Wednesday
9.	28.05.2022	Thursday
10.	04.06.2022	Friday
11.	11.06.2022	Monday

04/03/2022

DIRECTOR
ACADEMIC COURSES

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NAAC NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL ACCREDITED

NBA NATIONAL BOARD OF ACCREDITATION ACCREDITED Civil | Chemical EEE | Mechanical

Academic Calendar for Higher Semester (Even Semester- March 2022 - June 2022)

March-2022				April-2022				May-2022				June-2022			
Dat		Day	Particulars	Dat		Day	Particulars	Dat		Day	Particulars	Dat		Day	Particulars
1		Tue		1	15	Fri		1		Sun	Holiday	1	61	Wed	IAT 3 - Two Units / Revision Classes
2		Wed		2		Sat	Holiday	2		Mon	Holiday	2	62	Thu	Revision Classes
3		Thu		3		Sun	Ramazan Start / Holiday	3		Tue	Ramzan	3	63	Fri	Revision Classes
4		Fri		4	16	Mon		4	37	Wed		4	64	Sat	Friday Time Table / Revision Classes
5		Sat		5	17	Tue		5	38	Thu	IAT 2- Unit one and half	5		Sun	Holiday
6		Sun	Holiday	6	18	Wed	IAT 1- Unit one and half	6	39	Fri	IAT 2- Unit one and half	6	65	Mon	Revision Classes
7		Mon	Reopen	7	19	Thu	IAT 1- Unit one and half	7	40	Sat	Monday Time Table / IAT 2- Unit one and half	7	66	Tue	Revision Classes
8		Tue		8	20	Fri	IAT 1- Unit one and half	8		Sun	Holiday	8	67	Wed	Revision Classes
9		Wed	Submission of course plan by all faculties to the respective HODs	9	21	Sat	Thursday Time Table / IAT 1- Unit one and half	9	41	Mon	IAT 2- Unit one and half	9	68	Thu	Revision Classes
10		Thu		10		Sun	Holiday	10	42	Tue	IAT 2- Unit one and half	10	69	Fri	Revision Classes
11		Fri		11	22	Mon	IAT 1- Unit one and half	11	43	Wed	IAT 2- Unit one and half	11	70	Sat	Monday Time Table / Revision Classes
12		Sat		12	23	Tue	IAT 1- Unit one and half	12	44	Thu		12		Sun	Holiday
13		Sun	Holiday	13	24	Wed	Unit -II Completion	13	45	Fri		13	71	Mon	Revision Classes
14		Mon		14		Thu	Tamil New Year	14	46	Sat	Tuesday Time Table	14	72	Tue	Revision Classes
15		Tue		15		Fri	Good Friday	15		Sun	Holiday	15	73	Wed	Revision Classes
16	1	Wed	Commencement of classes	16		Sat	Holiday	16	47	Mon		16	74	Thu	Revision Classes
17	2	Thu		17		Sun	Holiday	17	48	Tue	Unit - IV Completion	17	75	Fri	Revision Classes / Last Working Day
18	3	Fri		18	25	Mon		18	49	Wed	Class Committee Meeting - 3	18		Sat	Commencement of Practical Examination

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19	4	Sat	Tuesday Time Table	19	26	Tue		19	50	Thu		19		Sun	Holiday
20		Sun	Holiday	20	27	Wed	Class Committee Meeting - 2	20	51	Fri		20		Mon	
21	5	Mon		21	28	Thu	Parents Meeting	21	52	Sat	Wednesday Time Table	21		Tue	
22	6	Tue		22	29	Fri	Parents Meeting	22		Sun	Holiday	22		Wed	
23	7	Wed		23	30	Sat	Friday Time Table / Parents Meeting	23	53	Mon		23		Thu	
24	8	Thu		24		Sun	Holiday	24	54	Tue		24		Fri	
25	9	Fri		25	31	Mon	Parents Meeting	25	55	Wed		25		Sat	
26	10	Sat	Wednesday Time Table / Class Committee Meeting -1	26	32	Tue	Parents Meeting	26	56	Thu		26		Sun	Holiday
27		Sun	Holiday	27	33	Wed	Parents Meeting	27	57	Fri		27		Mon	
28	11	Mon		28	34	Thu		28	58	Sat	Thursday Time Table	28		Tue	Commencement of End Semester Theory Examinations
29	12	Tue	Unit -I Completion	29	35	Fri		29		Sun	Holiday	29		Wed	
30	13	Wed		30	36	Sat	Tuesday Time Table / Unit -III Completion / Question paper submision	30	59	Mon		30		Thu	
31	14	Thu						31	60	Tue	Unit - V Completion				

Total No.of Working Days: 14		**Total No.of Working Days: 22**		**Total No.of Working Days: 24**		**Total No.of Working Days: 15**	
Period / Day	**1**	**2**	**3**		**4**	**5**	
	9.00 AM	**9.46 AM**	**10.31 AM**	**11.16 AM**	**11.31 AM**	**12.16 PM**	**1.01PM**
	9.45 AM	**10.30 AM**	**11.15 AM**	**11.30 AM**	**12.15 PM**	**1.00 PM**	**1.45 PM**
Monday - Friday	**Theory Classes**			**Tea Break**	**Theory Classes**		**LUNCH**
Period / Day	**6**	**7**	**8**				
	1.46 PM	**2.31 PM**	**3.16 PM**				
	2.30 PM	**3.15 PM**	**4.00 PM**				

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Ref. No.: MSEC / ADMIN / OO / 2021-22 / 03 Date: 16/03/2022

OFFICE ORDER

The following staff members are appointed as members of Academic Administration Committee with immediate effect till further notice.

It is formed to monitoring the effective curriculum planning and delivery through a well planned documented process including Academic calendar and review the continuous internal and university assessment.

Academic Administration Committee

S.No	Member Name	Designation	Position
1	Dr.N.Mohamed Sheriff	Principal	President
2	Mr.M.Mohamed Rafi	IQAC Coordinator	Vice President
3	Dr.E.Dhiravidachelvi	Head Planning	Member Secretary
4	Dr.D.Alagiya Meenal	Head Academic	Member Secretary
5	Dr.M.Vijayaraj	Head of Department /CSE	Member
6	Mr.G.Thangavelu	Head of Department/ Marine	Member
7	Dr.B.Ayushabanu	Head of Department /IT	Member
8	Dr.M.Abbas Malik	Head of Department /MBA	Member
9	Dr.T.Hariharan	Head of Department /Chemical	Member
10	Dr.M.Vadivel	Head of Department /Chemistry	Member
11	Dr.S.Boobalan	Head of Department /EEE	Member
12	Mr.H.Peer Oli	Head of Department/ECE	Member
13	Ms.G.Muthumari	Head of Department /Civil	Member
14	Ms.S.Benasir	Head of Department /ARCH	Member
15	Dr.C.Jayaseelan	Professor/Mechanical	Member

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2. IQAC
3. Office file
4. All HoD’s

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MSEC/CSE/DAB/MoM/2021-22/002 25.01.2022

MINUTES OF DEPARTMENT ADVISORY BOARD MEETING

The Department Advisory Board meeting for the Even semester of academic year 2021-2022 was conducted on 24.01.2022 at 10.30 AM via Google Meet(https://meet.google.com/cgi-bfew-mip)

AGENDA:

- Sharing the Department activities for the last Semester (2021-2022 ODD Semester)
- Discussion on Curriculum and Syllabus Regulations 2017 & 2021
- Discussion about Current Requirements of Industry
- Sharing Demand and Views of IT Company by Alumni
- Curriculum Gap Analysis by External and Internal Academicians and propose action plan for the forth coming Semester.
- Conclusion

The following members of advisory board committee attended the meeting

S.NO	Name of the Member	Designation
Chairperson		
1	Dr. M. Vijayaraj	Chairperson / HOD
Department Faculties		
2.	Dr. T.Sheik Yousuf	Professor
3.	Prof. M.Mohamed Sithik	Associate Professor
4.	Dr V. Balamurugan	Associate Professor
5.	Dr B. Rasina Begum	Associate Professor
External Faculties		
6.	Dr. D. Suresh	Associate professor,Department of computer science and engineering, Annamalai University, Chidambaram
7.	Dr. E. Srie Vidhya Janani	HOD, Department of CSE, Anna University Regional Campus Madurai
8.	Dr. A. Kanmani	HOD, Department of CSE, Syed Ammal Engineering College Ramanathapuram
Industrialist		
9.	Mr. S. Karthikeyan	Proprietor RAYTECH Computers, Ramanathapuram

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Alumni		
10.	M. Laila Banu	Associate @ Cognizant Technology Solutions, Chennai
11.	N. Feraz Mohamed	Senior software engineer Solverminds solutions and technology, Chennai
Students Representative		
12.	Mr. M. Dhanush	I Year BE(CSE)
13.	Ms. M.S. Yazhini	II year BE(CSE)
14.	Mr. S. Mohamed Fawwash Khan	III Year BE(CSE)
15.	Mr. N.Sheik Abdullah	IV Year BE(CSE)
16.	Mr. Abdur Rahman	II Year ME(CSE)

Suggestions and Comments received during DAB meeting are as follows.

- The meeting started with an address by **Dr.M. Vijayaraj,** Head of the Department of CSE and he extended a warm welcome to the Advisory board committee Members and a sincere gratitude was expressed towards all the members present for the meeting. And he also thanked the Principal, all Head's and IQAC cell for given permission to conduct this meeting.
- Student's Representative requested to conduct more seminars, Webinars and training programme in order to know the recent trend in Information Technology.
- **Mr.S.Karthikeyan** from Raytech Computers, Ramanathapuram insisted the importance of Python, Full Stack Developer and Mini Project. He also suggested that the students should get vast knowledge beyond their syllabus.
- Our Alumni **Ms. M. Laila Banu,** Associate @ CTS, Chennai insisted the need of Personality development even though students having sound technical skill.
- Our Alumni **Mr. N.Feraz Mohamed** advised the students regarding the mini project and highlighted the importance of the project during Job Interview.
- External Academician **Dr. E.Srie Vidhya Janani** , Head of Computer Science and Engineering ,Anna University Regional Campus Madurai suggested that the students should not stick on particular programming Language and they should learn many languages. She also suggested conduct more hands on training programme and also permit the students to go for Inplant training with Stipend once in a semester . Also she highlighted the importance of online certification course like Swayam and NPTEL to be registered by the Faculty members and students.
- External Academician **Dr. D. Suresh** ,Associate Professor, Department of Information Technology, Annamalai University, Chidambaram enumerated the importance of Swayam and NPTEL courses for getting in-depth knowledge in a particular subject. He instructed to follow up the Bloom's Taxonomy in Teaching Learning Process, also pointed out the skill development course for the students.
- External Academician **Dr. A. Kanmani,** Head of Computer Science and Engineering, Syed Ammal Engineering College, Ramanathapuram, advised students to learn more techniques

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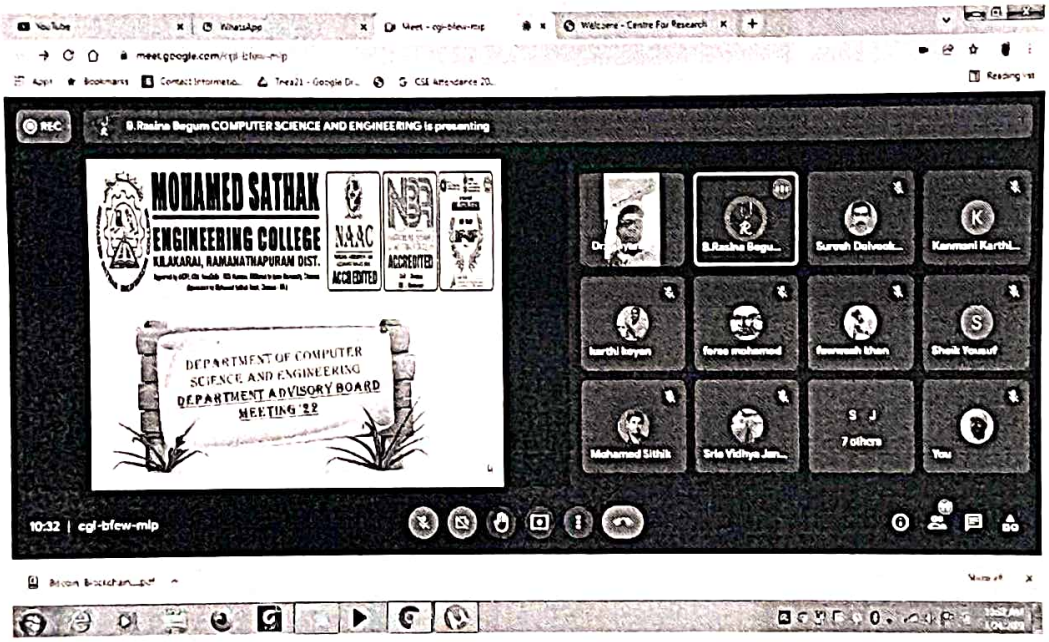
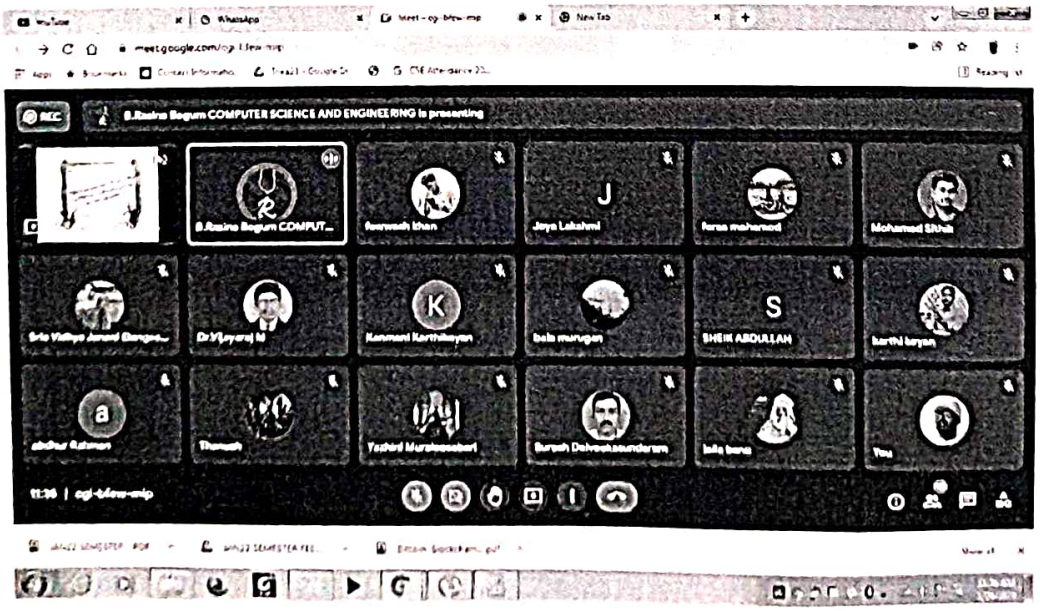
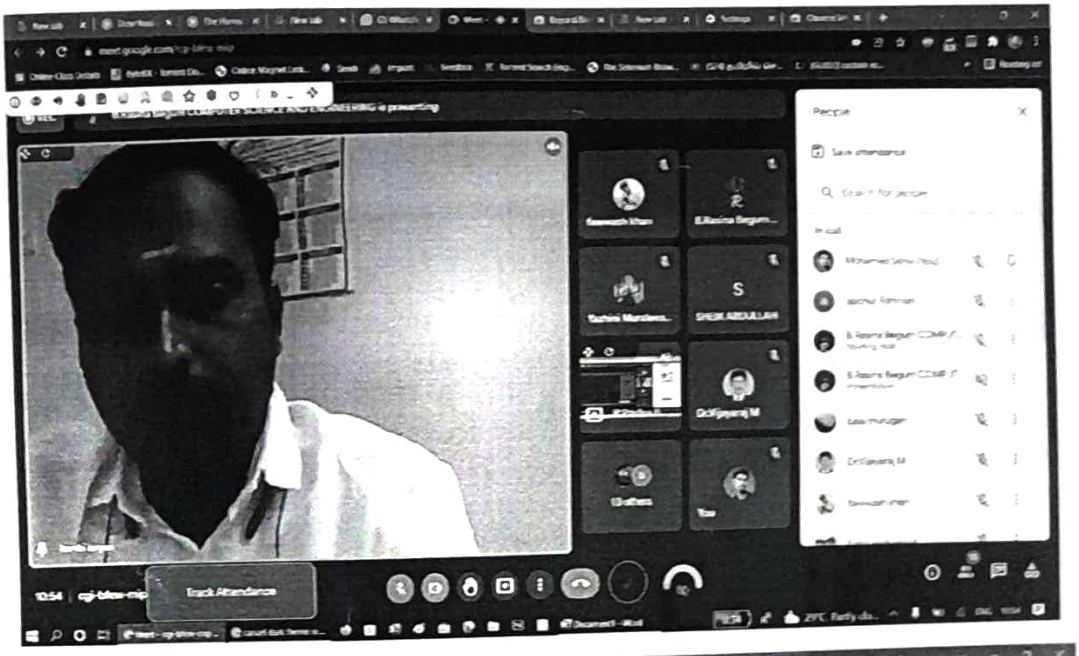
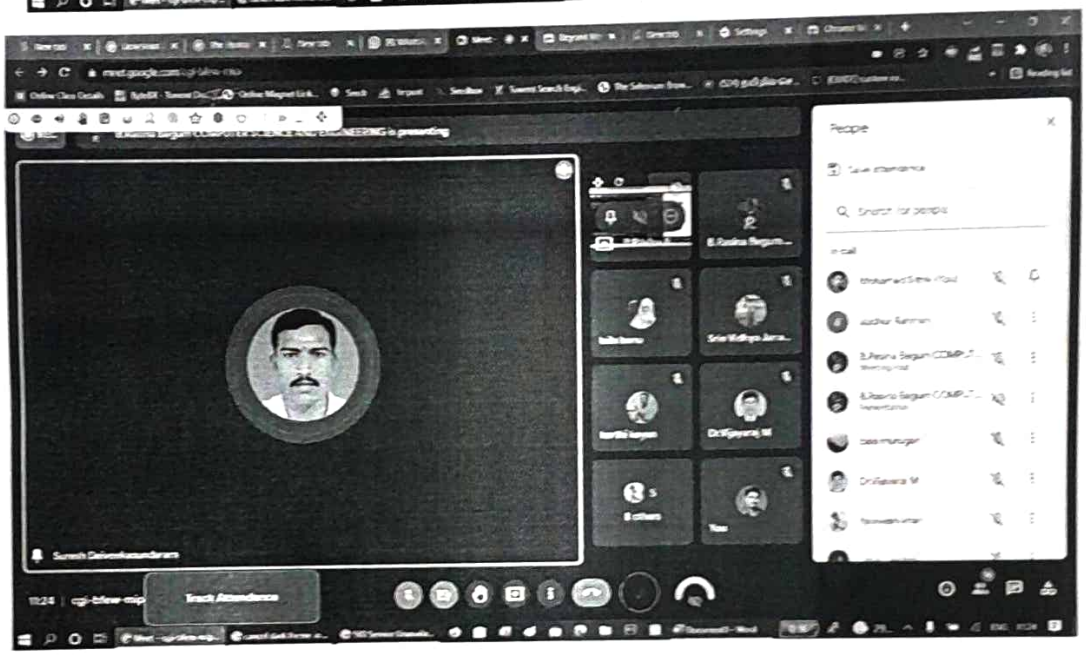
beyond Syllabus. She also stated the importance of Swayam and NPTEL courses. She also asked students to develop mini project effectively.

- **Dr.M.Vijayaraj**, Head of the department discussed about the new Regulation syllabus R-2021 and also given an overview about Open Elective and Professional Elective.
- Internal Academician **Dr.T.Sheik Yousuf** , Professor, Computer Science and Engineering suggested that entrepreneurship awareness camp should be organized in the department to motivate students to become entrepreneur.
- Internal Academician **Prof .M.Mohamed Sithik** , Associate Professor, Computer Science and Engineering suggested to conduct Alumni meeting twice in a year.
- Internal Academician **Dr.V.Balamurugan** Associate Professor, Computer Science and Engineering suggested to conduct more value added courses for the betterment of students community.
- Finally **Dr. B.Rasina Begum**, Associate Professor, Computer Science and Engineering concluded the session and thanked everyone for their active participation.









28-1-2022
Coordinator
(B. RASINA BEGUM)

HOD
25/1/22
Head of the Department
Computer Science and Engineering
Mohamed Sathak Engineering College

25/1/22
Head - Academics

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MSEC/CSE/DAB/AP/2021-22/002 28.01.2022

ACTION PLAN FOR DEPARTMENT ADVISORY BOARD MEETING

The Department Advisory Board meeting for the even semester of academic year 2021-2022 was conducted on 24.01.2022 at 10.30 AM via Google Meet (https://meet.google.com/cgi-bfew-mip). The following actions have been taken in accordance with the Minutes of Meeting dated 25.01.2022

Action Plan:

- The students are advised to take part in online skill development programme like NPTEL, Swayam to enhance their technical skills.
- In-Plant Training will be arranged at the end of this academic year with stipend.
- Industrial Visits will be arranged in beginning of upcoming semester
- Technical events like Symposiums and Workshops will be arranged often in every semester.
- Alumni Meet will be arranged at least twice a year inside and outside of our college campus.
- Head of the Department will conduct a meeting with college Heads regarding the value added courses in our department.
- The students are advised to enhance their knowledge about entrepreneurship to know more about the current trends in the Computer Related Jobs.

Coordinator
(B. RAGINA BEGUM)

HOD
Head of the Department
Computer Science and Engineering
Mohamed Sathak Engineering College
Kilakarai-623806

Head - Academics

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Department of Computer Science and Engineering

SKILL MATRIX (ACADEMIC YEAR 2021-22)

S.No	SUBJECT TO BEHANDLED FOR EVEN SEMESTER OF 2021-22	FACULTY SERIAL NUMBER									
		1	2	3	4	5	6	7	8	9	10
1	CS8085 - Social Network Analysis	A	A	**B**	C	A	C	C	C	C	**A**
2	CS8080 - Information Retrieval Techniques	C	A	C	C	C	C	C	C	C	C
3	CS8651 - Internet Programming	B	C	C	C	C	**A**	C	C	C	C
4	CS8691 - Artificial Intelligence	A	C	C	**A**	B	B	C	A	C	C
5	CS8601 - Mobile Computing	C	C	C	C	**A**	C	C	A	C	C
6	CS8602 - Compiler Design	C	C	C	C	C	C	C	**A**	C	C
7	CS8603 - Distributed Systems	C	C	C	C	C	A	**A**	C	C	C
8	GE8075 - Intellectual Property Rights	C	**A**	C	C	C	C	C	C	A	C
9	CS8491 - Computer Architecture	C	C	C	B	C	C	B	**A**	A	C
10	CS8492 - Database Management Systems	B	C	**A**	C	C	A	**A**	C	C	C
11	CS8451 - Design and Analysis of Algorithms	C	C	C	C	C	C	C	C	**A**	C
12	CS8493 - Operating Systems	C	C	C	**A**	C	C	C	C	B	C
13	CS8494 - Software Engineering	**A**	C	C	C	B	B	C	A	C	C
14	CS8251 - Design and Analysis of Algorithms(II Year IT)	C	C	C	C	C	C	C	C	**A**	C
15	CS3251 - Programming in C (CSE)	C	C	C	C	C	C	C	C	B	**A**

Faculty Serial Number	Staff Name	Allotted Sub.code
1	Dr.M.Vijayaraj	**CS8494**
2	Dr.T.Sheik Yousuf	**GE8075**
3	Mr.M.MohamedSithik	**CS8085**
4.	Dr.V.Balamurugan	**CS8691,CS8493**
5	Ms.B.Rasina Begum	**CS8601**
6	Mr.S.Ramamoorthi	**CS8651**
7	Mr.S.FaizalMukthar Hussain	**CS8492,CS8603**

Faculty Serial Number	Staff Name	Allotted Sub.code
8	Ms.C.Jeyalakshmi	**CS8602,CS8491**
9	Mr.S.A.MohammedUveise	**CS8451,CS8251**
10	Mr.J.Mohammad Bilal	**CS8085,CS3251**

Label	Description
A	Handled the Subject 3 Times or More
B	Handled the Subject 2 Times
C	Handled the Subject 1 Time

Head of the Department
Computer Science and Engineering
Mohamed Sathak Engineering College,
Kilakarai-623806.

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KILAKARAI - 623 806

Department of Computer Science and Engineering

ACADEMIC YEAR (2021-2022)

ELECTIVE SUBJECT SELECTION PROCESS (2017 REGULATION)

List of Elective Subjects (SEMESTER VI – ELECTIVE I)

Sl.No	Subject Code	Subject Name
1.	CS8075	Data Warehousing and Data Mining
2.	IT8076	Software Testing
3.	IT8072	Embedded Systems
4.	CS8072	Agile Methodologies
5.	CS8077	Graph Theory and Applications
6.	IT8071	Digital Signal Processing
7.	GE8075	Intellectual Property Rights

Class:III CSE

Sl.No	Register Number	Student Name	GE8075
1	911519104001	Abishek B	
2	911519104002	Abu Afeef S	
3	911519104003	Afra A	
4	911519104004	Afrin Shahnaj S	
5	911519104005	Ajaykumar V	
6	911519104007	Deebika P	
7	911519104008	Dharani S	
8	911519104009	Fahima H	
9	911519104010	Gayathri U	
10	911519104011	Gunasekaran G	
11	911519104012	Hoorul Ameen J	
12	911519104013	Iniyanayagam N	
13	911519104014	Issathu Nisha M	
14	911519104015	Janarthanan S	
15	911519104016	Kesavan N	
16	911519104018	Maheswaran P	
18	911519104019	Manicka Vasagam	
19	911519104020	Mohamed Ajeem	
20	911519104021	Mohamed Fawwash Khan S	
21	911519104022	Mohamed Najith J	
22	911519104023	Mohamed Suhail	
23	911519104024	Naveen B	

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24	911519104025	Pandeeswaran P	
25	911519104026	Panish Kanth M	
26	911519104027	Preethika I	
27	911519104028	Radhika S	
28	911519104029	Rahuman Beevi M	
29	911519104030	Sabeera Barveen S	
30	911519104031	Sanaa M	
31	911519104032	Sanjay K	
32	911519104033	Seyed Rasiyammal	
33	911519104034	Suhaina S	
34	911519104035	Sulfa S	
35	911519104037	Thillai Raj S	
36	911519104038	Vidhesh Lingam I	
37	911519104039	Vigneshkumar V	
38	911519104301	Sanjay G	

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DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 19.11.2021

Submitted to the Principal

Sir,

Sub: Subject Allocation for Even Semester 2021-2022 – Reg

The details of Workload for forthcoming Even Semester 2021-2022 is mentioned below for your kind information.

Details of Subjects

S.No	SEMESTER	SUBJECTS FOR EVEN SEMESTER 2020-2021
1	04	CS8491 & Computer Architecture
2	04	CS8492 & Database Management Systems
3	04	CS8451 & Design and Analysis of Algorithms
4	04	CS8493 & Operating Systems
5	04	CS8481 & Database Management Systems Laboratory
6	04	CS8461 & Operating Systems Laboratory
7	06	IT8601 & Computational Intelligence
8	06	CS8592 & Object Oriented Analysis and Design
9	06	IT8602 & Mobile Communication
10	06	CS8091 & Big Data Analytics
11	06	CS8092 & Computer Graphics and Multimedia
12	06	IT8076 & Professional Elective I:Software Testing
13	06	CS8662 & Mobile Application Development Laboratory
14	06	CS8582 & Object Oriented Analysis and Design Laboratory
15	06	IT8611 & Mini Project
16	08	IT8073 & Information Security(Professional Elective IV)
17	08	IT8005 & Electronic Commerce (Professional Elective V)
18	08	IT8811 & Project Work

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Dr. M.Vijayaraj M.E.,Ph.D.,MISTE.,MIE.,
Professor & Head
Department of Computer Science and Engineering
Mohamed Sathak Engineering College
Kilakarai - 623 806.

Department of Computer Science and Engineering

Date: 25.11.2021

SUBJECT ALLOCATION FOR EVEN SEMESTER (2021 – 2022)

SEMESTER VIII

S.No	Sub. Code	Subject Name	Staff Name
Theory			
1	CS8085	Social Network Analysis (Elective – IV)	Mr. M. Mohamed Sithik
2	CS8080	Information Retrieval Techniques (Elective – V)	Mr.S.Ramamoorthi
Practical			
3	CS8811	Project Work	Mr. M. Mohamed Sithik

SEMESTER VI

S.No	Sub. Code	Subject Name	Staff Name
Theory			
1	CS8651	Internet Programming	Mr.S.Ramamoorthi
2	CS8691	Artificial Intelligence	Dr.V.Balamurugan
3	CS8601	Mobile Computing	Dr.B.Rasina Begam
4	CS8602	Compiler Design	Ms.C.Jeyalaksmi
5	CS8603	Distributed Systems	Mr. S.Faizal Mukthar Hussain
6	GE8075	Intellectual Property Rights	Dr.T.Sheik Yousuf
Practical			
7	CS8661	Internet Programming Laboratory	Mr.S.Ramamoorthi
8	CS8662	Mobile Application Development Laboratory	Mr.S.A.Mohamed Uveise
9	CS8611	Mini Project	Ms.C.Jeyalaksmi
10	HS8581	Professional Communication	Mrs.D.T.Baladurai Selvi

Dr. M.Vijayaraj M.E.,Ph.D.,MISTE.,MIE.,
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SEMESTER IV

S.No	Sub. Code	Subject Name	Staff Name
Theory			
1	MA8402	Probability and Queueing Theory	Maths Staff 1
2	CS8491	Computer Architecture	Ms.C.Jeyalaksmi
3	CS8492	Database Management Systems	Mr. S.Faizal Mukthar Hussain
4	CS8451	Design and Analysis of Algorithms	Mr.S.A.Mohamed Uveise
5	CS8493	Operating Systems	Dr.V.Balamurugan
6	CS8494	Software Engineering	Dr.M.Vijayaraj
Practical			
7	CS8481	Database Management Systems Laboratory	Mr. S.Faizal Mukthar Hussain
8	CS8461	Operating Systems Laboratory	Dr.V.Balamurugan
9	HS8461	Advanced Reading and Writing	English Staff 1

II Year B.Tech (IT) – IV Semester

S.No	Sub. Code	Subject Name	Staff Name
1	CS8451	Design and Analysis of Algorithms	Mr.S.A.Mohamed Uveise

I Year B.E – II Semester

S.No	Sub. Code	Subject Name	Staff Name
Theory			
1	CS3251	Programming in C (CSE)	Mr.J.Mohammad Bilal
2	CS3251	Programming in C (IT)	Mr.J.Mohammad Bilal
Practical			
3	CS3271	C Programming Laboratory (CSE)	Mr.J.Mohammad Bilal
4	CS3271	C Programming Laboratory (IT)	Mr.J.Mohammad Bilal

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Principal

Dr. M.Vijayaraj M.E.,Ph.D.,MISTE.,MIE.,
Professor & Head
Department of Computer Science and Engineering
Mohamed Sathak Engineering College
Kilakarai - 623 806.

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Department of Computer Science and Engineering

Date: 25.11.2021

II M.E (CSE) – IV Semester

S.No	Sub. Code	Subject Name	Staff Name
Practical			
1	CP7311	Project Work (Phase II)	Dr.M.Vijayaraj

I M.E (CSE) – II Semester

S.No	Sub. Code	Subject Name	Staff Name
Theory			
1	CP5201	Network Design and Technologies	Dr.V.Balamurugan
2	CP5291	Security Practices	Mr. S.Faizal Mukthar Hussain
3	CP5292	Internet of Things	Mr. M. Mohamed Sithik
4	CP5293	Big Data Analytics	Mr.S.Ramamoorthi
5	CP5092	Cloud Computing Technologies	Dr.B.Rasina Begam
6	CP5072	Software Architectures and Design	Dr.T.Sheik Yousuf
Practical			
7	CP5261	Data Analytics Laboratory	Mr.S.Ramamoorthi
8	CP5281	Term Paper Writing and Seminar	Mr. S.Faizal Mukthar Hussain

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Dr. M.Vijayaraj M.E.,Ph.D.,MISTE.,MIE.,
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WORKLOAD ALLOTMENT FOR THE PERIOD OF ~~ODD~~ / EVEN SEM 2021 / 2022

S.No	Faculty Name	Degree/Branch	Sem/Year	T / L / TU	Sub. Code / Name of the Subject	Periods / Week	Total Periods / Week	Other Responsibilty if any	Faculty Signature
1	Dr. M.Vijayaraj	BE/CSE	II CSE	T1	CS8494 – Software Engineering	5	5	1. HOD 2. Coordinator Professional Bodies Cell IEI, IEEE, etc 3.NAAC, NBA, ISO Activities	
2	Dr. T.Sheik Yousuf	BE/CSE	III CSE	T1	GE8075 - Intellectual Property Rights	5	5	1. Head - Placement and Alumini 2. Admission Activities	
		BE/EEE	III EEE	T2	GE8075 - Intellectual Property Rights	5	5		
3	Mr. M. Mohamed Sithik	BE/CSE	IV CSE	T1	CS8085 – Social Network Analysis	5	5	1. Exam Cell Head 2.Faculty Advisor - IV Year	
4	Dr. V.Balamurugan	BE/CSE	III CSE	T1	CS8691 – Artificial Intelligence	5	14	1. CISCO Trainer 2. Department Association Activities 3.Faculty Advisor-III Year	
		BE/CSE	II CSE	T2	CS8493 – Operating Systems	5			
		BE/CSE	II CSE	L1	CS8461 – Operating Systems Laboratory	4			
5	Dr. B.RasinaBegam	BE/CSE	III CSE	T1	CS8601 – Mobile Computing	5	5	1. Admission Coordinator	
6	Mr. S.Ramamoorthi	BE/CSE	III CSE	T1	CS8651- Internet Programming	5	14	1.R & D,CoE Coordinator 2.Time Table Coordinator 3.CISCO Trainer	
		BE/CSE	IV CSE	T2	CS8080 - Information Retrieval Techniques	5			
		BE/CSE	III CSE	L1	CS8661 – Internet Programming	4			

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7	Mr. S.Faizal Mukthar Hussain	BE/CSE	II CSE	T1	CS8492 - Database Management Systems	5	9	1. Admission Coordinator-DSY 2.Department Library Incharge 3.CISCO Trainer 4.CSE-Student Affairs	
		BE/CSE	II CSE	L1	CS8481 - Database Management Systems Laboratory	4			
8	Ms. C.Jeyalaksmi	BE/CSE	III CSE	T1	CS8602 - Compiler Design	5	12	1. Coordinator for Spoken Tutorial, Value added Courses and advancement Cources	
		BE/CSE	II CSE	T2	CS8491 - Computer Architecture	5			
		BE/CSE	III CSE	L1	CS8611- Mini Project	2			
9	Mr. S.A.Mohammed Uveise	BE/CSE	II CSE	T1	CS8451 - Design and Analysis of Algorithms	5	14	1. CSE-Academic In charge 2.Faculty Advisor-II Year 3.College Website Coordinator. 4.TNEA Councelling Coordinator	
		B.TECH/IT	II IT	T2	CS8451 - Design and Analysis of Algorithms	5			
		BE/CSE	III CSE	L1	CS8662 - Mobile Application Development Laboratory	4			
10	Mr. J.Mohammad Bilal	BE/CSE	I CSE	T1	CS3251 - Programming in C (CSE)	5	14	1. CSE-Training and Placement Officer	
		BE/CSE	III CSE	T2	CS8603 – Distributed Systems	5			
		BE/CSE	I CSE	L1	CS3271 - C Programming Laboratory (CSE)	4			

*T1-Theory1, T2-Theory 2, T3-Theory 3, T4-Theory 4, L1-Lab1, L2-Lab 2, TU-Tutorial

IQAC COORDINATOR

HOD-CSE

Dr. M.Vijayaraj M.E.,Ph.D.,MISTE,MIE.,
Professor & Head
Department of Computer Science and Engineering
Mohamed Sathak Engineering College
Kilakarai - 623 806.

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Department of Computer Science and Engineering

CLASS TIMETABLE

Version No:	2	With effect from:	16-03-2022
Academic year:	2021-22	Degree/Branch:	BE/CSE
Department:	CSE	Semester:	6
Year / Sem / Section:	III/06	Room No:	LH 59
Name of the CI:	Dr. V.Balamurugan	Class Strength:	37

Period/ Day	1	2	3	11.16-11.30	4	5	1.01-1.45 PM	6	7	8
	9.00-9.45 AM	9.46-10.30 AM	10.31-11.15 AM		11.31-12.15 AM	12.16-1.00 PM		01.46- 02.30 PM	2.31-3.15 PM	3.16-4.00 PM
MON	CS8602/ CJL	CS8601/ BRB	CS8651/ SRM	TEA BREAK	CS8603/ MMS	CS8691/ VBM	LUNCH BREAK	CS8603/ MMS	CS8661 / IP LAB/ SRM, SFM	
TUE	GE8075/ TSY	CS8691/ VBM	CS8603/ MMS		CS8602/ CJL	CS8651/ SRM		CS8601/ BRB	CS8662/ MAD LAB/ AMU,VBM	
WED	CS8651/ SRM	CS8603/ MMS	CS8602/ CJL		CS8601/ BRB	CS8691/ VBM		CS8602/ CJL	IVA029 / VAC / SRM, NS	
THU	GE8075/ TSY	GE8075/ TSY	CS8601/ BRB		CS8651/ SRM	CS8602/ CJL		CS8691/ VBM	HS8581 / PC LAB/ DTBS	
FRI	GE8075/ TSY	GE8075/ TSY	CS8691/ VBM		CS8601/ BRB	CS8603/ MMS		CS8651/ SRM	CS8611 / MP/ CJL,JMB	

THEORY& LABORATORY DETAILS:

S.No	Subject Code	Name of the Subject	Name of the Faculty	Dept	No. of Hours per Week				
					L	T	P	O	Total
1	CS8651	Internet Programming	Mr.S.Ramamoorthi	CSE	5	0	0	0	5
2	CS8691	Artificial Intelligence	Dr.V.Balamurugan	CSE	5	0	0	0	5
3	CS8601	Mobile Computing	Dr.B.Rasina Begam	CSE	5	0	0	0	5
4	CS8602	Compiler Design	Ms.C.Jeyalaksmi	CSE	5	0	0	0	5
5	CS8603	Distributed Systems	Mr.M.Mohamed Sithik	CSE	5	0	0	0	5
6	GE8075	Intellectual Property Rights	Dr.T.Sheik Yousuf	CSE	5	0	0	0	5
LABORATORY									
7	CS8661	Internet Programming Laboratory	Mr.S.Ramamoorthi, Mr. S.Faizal Mukthar Hussain	CSE	0	0	2	0	2
8	CS8662	MAD Laboratory	Dr. V.Balamurugan Mr.S.A.Mohamed Uveise	CSE	0	0	2	0	2
9	CS8611	Mini Project	Ms.C.Jeyalaksmi Mr. J.Mohammad Bilal	CSE	0	0	2	0	2
10	HS8581	Professional Communication	Mrs.D.T.Baladurai Selvi	English	0	0	2	0	2
OTHERS									
11	IVA029	Angular JS	Mr.S.Ramamoorthi, Mr.Nagasubramani	CSE	0	0	0	2	2

Note: L-Lecture, T-Tutorial, P-Practical, O-Other

*Kindly sign with date

HoD

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Principal

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Department of Computer Science and Engineering

FACULTY INDIVIDUAL TIMETABLE

Name of the Faculty with designation: Dr.M.Vijayaraj, Professor and Head

Period/ Day	1	2	3	11.16-11.30 AM	4	5	1.01-1.45 PM	6	7	8
	9.00-9.45 AM	9.46-10.30 AM	10.31-11.15 AM		11.31-12.15 AM	12.16-1.00 PM		01.46-02.30 PM	2.31-3.15 PM	3.16-4.00 PM
MON			CP4151/ I ME	TEA BREAK		CS8494/ MVR	LUNCH BREAK		CP4151/ I ME	
TUE		CS8494/ MVR			VAC/ IVA042/ IV CSE			CP4151/ I ME		
WED			CS8494/ MVR		CP4151/ I ME					
THU	CS8494/ MVR		CP4151/ I ME		VAC/ IVA042/ IV CSE					
FRI		CP4151/ I ME	CS8494/ MVR							

Sl. No	Branch/Year/Sem	Subject Code	Subject Name	No. of Hours
1	CSE/ II / 04	CS8494	Software Engineering	5
2	ME-CSE/ I / 01	CP4151	Advanced Data Structures and Algorithms	6
3	CSE/ IV / 08	IVA042	Blockchains and Cryptocurrencies	4
			Total No of Hours	15

Additional Responsibility		
Sl. No	**Department Level**	**Institute Level**
1	HOD	Coordinator Professional Bodies Cell IEI, IEEE, etc
2	NAAC, NBA, ISO Activities	College Website Coordinator

*Kindly sign with date

Timetable Coordinator
Mr.S.Ramamoorthi

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HoD
Dr.M.Vijayaraj

Received on 15/3/22

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Department of Computer Science and Engineering

Academic Year: 2021- 22 — MASTER TIMETABLE — **Sem: EVEN**

DAY & TIME	Year	1 9.00-9.45 AM	2 9.46-10.30 AM	3 10.31-11.15 AM	11.16-11.30 AM	4 11.31-12.15 AM	5 12.16-1.00 PM	1.01-1.45 PM	6 01.46-02.30 PM	7 2.31-3.15 PM	8 3.16-4.00 PM
MON	II Yr	CS8492/ SFM	MA8402/ VR	CS8493/ VBM	TEA BREAK	CS8491/ CJL	CS8494/ MVR	LUNCH BREAK	CS8451/ AMU	LIB/ CJL	APT/ VR
	III Yr	CS8602/ CJL	CS8601/ BRB	CS8651/ SRM		CS8603/ MMS	CS8691/ VBM		CS8603/ MMS	CS8661 / IP LAB/ SRM, SFM	
	IV Yr	CS8080/ SRM	CS8085/ MMS	CS8085/ MMS		Aptitude / SRM			Project Work		
TUES	II Yr	CS8451/ AMU	CS8494/ MVR	CS8492/ SFM		CS8493/ VBM	MA8402/ VR		CS8491/ CJL	HS8461 / ARW LAB/	
	III Yr	GE8075/ TSY	CS8691/ VBM	CS8603/ MMS		CS8602/ CJL	CS8651/ SRM		CS8601/ BRB	CS8662/ MAD LAB/	
	IV Yr	CS8080/ SRM	CS8085/ MMS	CS8080/ SRM		VAC/ IVA042/ MVR			Project Work		
WED	II Yr	CS8491/ CJL	CS8493/ VBM	CS8494/ MVR		CS8451/ AMU	MA8402/ VR		CS8492/ SFM	CS8481 / DBMS LAB/	
	III Yr	CS8651/ SRM	CS8603/ MMS	CS8602/ CJL		CS8601/ BRB	CS8691/ VBM		CS8602/ CJL	IVA029 / VAC / SRM, NS	
	IV Yr	CS8085/ MMS	CS8080/ SRM	CS8085/ MMS		Technical / MMS			Project Work		
THUR	II Yr	CS8494/ MVR	CS8451/ AMU	CS8491/ CJL		CS8493/ VBM	CS8492/ SFM		MA8402/ VR	CS8461 / OS LAB/ VBM,AMU	
	III Yr	GE8075/ TSY	GE8075/ TSY	CS8601/ BRB		CS8651/ SRM	CS8602/ CJL		CS8691/ VBM	HS8581 / PC LAB/ DTBS	
	IV Yr	CS8085/ MMS	CS8080/ SRM	CS8085/ MMS		VAC/ IVA042/ MVR			Project Work		
FRI	II Yr	MA8402/ VR	CS8492/ SFM	CS8494/ MVR		CS8451/ AMU	CS8491/ CJL		CS8493/ VBM	COE - CISCO/ VBM,SRM,SFM	
	III Yr	GE8075/ TSY	GE8075/ TSY	CS8691/ VBM		CS8601/ BRB	CS8603/ MMS		CS8651/ SRM	CS8611 / MP/ CJL,JMB	
	IV Yr	CS8080/ SRM	CS8085/ MMS	CS8080/ SRM		Aptitude / SRM	Aptitude /MMS		Project Work		

*Kindly sign with date

IV CSE

Subject Code	Subject Name	Staff Code	Staff Name	Period
CS8085	Social Network Analysis	MMS	Mr. M. Mohamed Sithik	5
CS8080	Information Retrieval Techniques	SRM	Mr.S.Ramamoorthi	5

III CSE

Subject Code	Subject Name	Staff Code	Staff Name	Period
CS8651	Internet Programming	SRM	Mr S Ramamoorthi	5
CS8691	Artificial Intelligence	VBM	Dr V Balamurugan	5
CS8601	Mobile Computing	BRB	Dr.B Rasina Begam	5
CS8602	Compiler Design	CJL	Ms C Jeyalaksmi	5
CS8603	Distributed Systems	JMB	Mr. M. Mohamed Sithik	5
GE8075	Intellectual Property Rights	TSY	Dr.T Sheik Yousuf	5
CS8661	Internet Programming Laboratory	SRM	Mr S Ramamoorthi	2
CS8662	Mobile Application Development Laboratory	AMU	Mr S.A.Mohamed Uveise	2
CS8611	Mini Project	CJL	Ms C Jeyalaksmi	2
HS8581	Professional Communication	DTBS	Mrs D.T.Baladurai Selvi	2

II CSE

Subject Code	Subject Name	Staff Code	Staff Name	Period
MA8402	Probability and Queueing Theory	VR	Mr V Ramesh	5
CS8491	Computer Architecture	CJL	Ms C Jeyalaksmi	5
CS8492	Database Management Systems	SFM	Mr. S.Faizal Mukthar Hussain	5
CS8451	Design and Analysis of Algorithms	AMU	Mr S.A.Mohamed Uveise	5
CS8493	Operating Systems	VBM	Dr.V.Balamurugan	5
CS8494	Software Engineering	MVR	Dr.M.Vijayaraj	5
CS8481	Database Management Systems Laboratory	SFM	Mr.S.Faizal Mukthar Hussain	2
CS8461	Operating Systems Laboratory	VBM	Dr V Balamurugan	2
HS8461	Advanced Reading and Writing	SD	Mr Saifuddeen	2

HoD — Head-Academic — Head - Planning — IQAC COORDINATOR — Principal

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CS8491 **COMPUTER ARCHITECTURE** L T P C
3 0 0 3

OBJECTIVES:

- To learn the basic structure and operations of a computer.
- To learn the arithmetic and logic unit and implementation of fixed-point and floating point arithmetic unit.
- To learn the basics of pipelined execution.
- To understand parallelism and multi-core processors.
- To understand the memory hierarchies, cache memories and virtual memories.
- To learn the different ways of communication with I/O devices.

UNIT I BASIC STRUCTURE OF A COMPUTER SYSTEM 9

Functional Units – Basic Operational Concepts – Performance – Instructions: Language of the Computer – Operations, Operands – Instruction representation – Logical operations – decision making – MIPS Addressing.

UNIT II ARITHMETIC FOR COMPUTERS 9

Addition and Subtraction – Multiplication – Division – Floating Point Representation – Floating Point Operations – Subword Parallelism

UNIT III PROCESSOR AND CONTROL UNIT 9

A Basic MIPS implementation – Building a Datapath – Control Implementation Scheme – Pipelining – Pipelined datapath and control – Handling Data Hazards & Control Hazards – Exceptions.

UNIT IV PARALLELISIM 9

Parallel processing challenges – Flynn's classification – SISD, MIMD, SIMD, SPMD, and Vector Architectures - Hardware multithreading – Multi-core processors and other Shared Memory Multiprocessors - Introduction to Graphics Processing Units, Clusters, Warehouse Scale Computers and other Message-Passing Multiprocessors.

UNIT V MEMORY & I/O SYSTEMS 9

Memory Hierarchy - memory technologies – cache memory – measuring and improving cache performance – virtual memory, TLB's – Accessing I/O Devices – Interrupts – Direct Memory Access – Bus structure – Bus operation – Arbitration – Interface circuits - USB.

TOTAL : 45 PERIODS

OUTCOMES:

On Completion of the course, the students should be able to:

- Understand the basics structure of computers, operations and instructions.
- Design arithmetic and logic unit.
- Understand pipelined execution and design control unit.
- Understand parallel processing architectures.
- Understand the various memory systems and I/O communication.

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INSTRUCTIONS

It is mandatory to maintain this Register properly by all the faculties.

1. The Register is compiled with Student's Attendance, Assessment of marks and Record of performance in the class.
2. All the details should be entered accurately in the respective columns like lesson plan, syllabus coverage, Attendance, Assessment, Summary of class work.
3. Total number of absentees should be marked at the end of the period without fail.
4. It is insisted to enter the total number of absentees at the bottom of each column at each page and affix their intials.
5. "Leave letter" must be collected from the absentees when they return.
6. Absentees list should be submitted to the Principal. (Leave availed leave for more than 3 days continuously.)
7. Register must be handed over to the HOD, when the faculty avails for long leave.
8. Percentage of each student's attendance for every month and semester should be filled on time.
9. Signature of the Principal must be obtained at the first page of Register every month.

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SYLLABUS COVERAGE

UNIT	DURATION	NO.OF HOURS / PERIODS		REASON FOR DEVIATION	REMARKS OF HOD	HOD INITIAL	PRINCIPAL INITIAL
		As per Syllabus	Actually Taken				
UNIT 1	From 16.3.22 To 28.3.22	10	10	—	—		
UNIT 2	From 30/3/22 To 22/4/22	10	10	—	—		
UNIT 3	From 22/4/22 To 10/5/22	10	10	—	—		
UNIT 4	From 11/5/22 To 21/5/22	10	10	—	—		
UNIT 5	From 23/5/22 To 28/5/22	10	10	—	—		

CS8491-COMPUTER ARCHITECTURE

L	T	P	C
3	0	0	3

Regulations : 2017		Year/Semester: II Year,04 Semester
S.No	Course Outcomes	PROGRAM EDUCATIONAL OBJECTIVES, PROGRAM OUTCOMES, PROGRAM SPECIFIC OBJECTIVES
CO1	Understand the basics structure of computers, operations and instructions.	PO1,PO2,PO3,PO4,PO5,PO6,PO7,PO8,PO9 PO10,PO11,PO12,PSO1,PSO2,PSO3
CO2	Design arithmetic and logic unit	
CO3	Understand pipelined execution and design control unit	
CO4	Understand parallel processing architectures	
CO5	Understand the various memory systems and I/O communication.	

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LESSON PLAN

UNIT	DATE	HOUR/ PERIOD	TOPICS TO BE COVERED
I	16/3	1	Basic structure of a computer System
	17/3	3	Functional Units
			Basic operational concepts
	18/3	5	Performance
	19/3	6	Instructions
	21/3	4	Language of the computer
	22/3	6	operations, operands
			Instruction representation
	24/3	3	Logical operations
	25/3	6	Decision making
	26.28	1,4	MIPS Addressing
II			Arithmetic for computers
	30/3	3	Addition
	4/4	4	Subtraction
	6/4	1	Multiplication
	8,13,20	5,1,6	Division
	21/4	3,6	Floating point representation

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LESSON PLAN

UNIT	DATE	HOUR/ PERIOD	TOPICS TO BE COVERED
	21/4	7	floating point operations
	22/4	3	subword parallelism
III			Processor and control unit
	22/4	5	A Basic MIPS implementation
	23/4	5	Building a Datapath
	26/4	5	control implementation Scheme
	27/4	4	Pipelining
	28/4	3	Pipelined datapath control
	29/4	5	Handling Data Hazards
	5/5	3	Control Hazards
	7/5/5	4	exception.
	10/5	8	PARALLELISM
	12-5-22	3	Parallel processing

LESSON PLAN

UNIT	DATE	HOUR/ PERIOD	TOPICS TO BE COVERED
			Challenges
	13-5-22	5	Flynn's classification SISD, MIMD, SIMD SPMD
	14-5	6	Vector Architecture
	16-5	4	Hardware Multithreading
	17-5	6	Multicore processor
	18-5	1	other Shared memory multiprocessor
	20-5-22	4	Introduction to Graphic processing unit clusters,
	20-5-22	5	warehouse scale computers and other message passing multiprocessor
V			Memory & I/O System
	23/5	4	Memory hierarchy
	23/5	7	Memory technology
	24/5	6	Cache memory
	24/5	7	Measuring and

SUMMARY OF CLASS WORK

Date: 16/3 Period: 1 Total Classes: 1 Unit: 2

Basic Structure of a computer system

The design and implementation of computer is the computer Archi.

Date: 17/3 Period: 3 Total Classes: 2 Unit: 2

Functional unit

Five units - Input unit, CPU Memory unit, control unit output unit

Date: Period: Total Classes: Unit:

Basic operational concepts

Input → process → store in memory → produce the output

$C = a + b$

Date: 18/3 Period: 5 Total Classes: 3 Unit: 2

performance

Computer performance

RISC performance

CISC performance eqn.

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SUMMARY OF CLASS WORK

Date: 19/3 Period: 6 Total Classes: 4 Unit: 2

Instruction

Sequence of code Eg:-

Load A, B

Add R_1, R_2, R_3

Date: 21/3 Period: 4 Total Classes: 5 Unit: 2

Language of computer

The High level language is

$C = a + b$

Date: 22/3 Period: 6 Total Classes: 6 Unit: 2

operation, operand, Instruction Representation

Add R_1, R_2, R_3

R_1, R_3, R_3 is the operand.

Date: Period: Total Classes: Unit:

Add - opcode perform operation. Instruction - I-format, R-format J-format.

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Course file

Subject Name : Computer Architecture

S.No	Content
1	Academic Calendar
2	Class Time Table
3	Students Roll List
4	Syllabus
5	Vision & Mission of the institute and Department
6	List of CO's and PO's and PSO's
7	CO and PO mapping
8	I. Lesson planning II. Tutorial plan III. Lecture delivery sheet IV. Subject lecture notes
9	E-Copies I. Animations II. E-Courses III. List of authors IV. List of text books
10	Subject Questions Bank
11	Quiz Questions Bank Unit Wise
12	Internal Exam Question Paper (MID paper)&Internal Exam Script
13	Measures Taken weak and bright students I. Weak Students(slow learners) II. Remedial Class Time Table III. Bright Students List
14	Curriculum gaps(if any)& Justifications
15	Co's Attainments
16	Previous Years Question Paper
17	Subject Wise Results
18	Attendance Register
19	Mini Projects On Subject
20	Others

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Prepared by

Jeyalakhsmi.C
Course Incharge

Effective Teaching Plan

Sub: Computer Architecture

Class: II B.E IV Sem CSE A.Y: 2021-22

LECTURE 1	**UNIT-I** **Importance of the Unit (5 min):** In this Unit the student learns the basic structure and Operations of a computer. **Pre-Requisites(5min):** Basic of a computer system, Induction, Evolution of computer . **Today's Topic (30 min) : Basic structure of a computer system** a) Computer Architecture b) Eight ideas. **Summary (5 min):** **Queries & Short Questions(5 min):** 1. Define Computer Architecture? (Remembering) 2. State computer organization? (Remembering) 3. Discuss the Eight ideas of the computer? (Understanding)
LECTURE 2	**Questions from Previous class (5 min):** 1. Differentiate computer Architecture and computer organization ? **2.** State design for Moore's Law? 3. State Use Abstraction to Simplify Design. **Today's Topic (35 min) : Functional units** List the various components of computer system and explain neat diagram. (Remembering) **Summary (5 min):** **Queries & Short Questions(5 min):** **1.** Tabulate the components of computer system.(Remembering) **2.** Differentiate DRAM and SRAM. (Analyzing)
LECTURE 3	**Questions from Previous class (5 min):** 1. What are the functions of control unit? 2. What are the various units in the computer? **Today's Topic (35 min) : Performance** Measure the performance of the computers: If computer A runs a program in 10 seconds, and computer B runs thesame program in 15 seconds, how much faster is A over B?(Evaluating)

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	Summary (5 min): **Queries & Short Questions(5 min):** 1. Calculate throughput and response time. (Applying) 2. Compose the CPU performance equation.(Creating)
LECTURE 4	**Questions from Previous class(5 min):** **1**. Formulate the equation of CPU execution time for a program. 2. Show the formula for CPU clock cycles required for a program. **Today's Topic (35 min) : Instructions** 1. Interpret the instruction set Architecture.(Understanding) 2. Evaluating the various techniques to represent instructions in a computer system(Evaluating) **Summary (5 min):** **Queries & Short Questions(5 min):** **1.** Explain the different types of instruction? (Understanding) 2. Write the Data Transfer instruction? (Understanding)
LECTURE 5	**Questions from Previous class(5 min):** 1. What are the Logical Instruction? 2. State control instruction. **Today's Topic (35 min): Language of the computer** 1. Identify the various operations in computer system. (Remembering) **2.** Examine the operands of computer hardware(Remembering) **Summary (5 min):** **Queries & Short Questions(5 min):** 1. Define Stored Program Concept. (Remembering) 2. Classify the instructions based on the operations they perform and giveone example to each category. (Applying)

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Submitted by

Name of the faculty

(C.JEYALAKSHMI)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

QUESTION BANK

SUBJECT : CS8491 COMPUTER ARCHITECTURE

SEM/YEAR: IV/ II

UNIT I -OVERVIEW & INSTRUCTIONS			
Functional Units -Basic Operational Concepts –Performance- Instructions- Language of the Computer Operations, Operands Instruction representation -Logical operations –decision making -MIPS Addressing			
	PART-A		
Q. No	**Questions**	**BT Level**	**Competence**
1	Express the equation for the dynamic power required per transistor.	BTL 2	Understanding
2	Identify general characteristics of Relative addressing mode with an example.	BTL 4	Analyzing
3	Define Computer Architecture	BTL 1	Remembering
4	Tabulate the components of computer system.	BTL 1	Remembering
5	Give the addressing modes in MIPS.	BTL 2	Understanding
6	Interpret the instruction set Architecture.	BTL 2	Understanding
7	Differentiate DRAM and SRAM.	BTL 4	Analyzing
8	Give the difference between auto increment and auto decrement addressing mode.	BTL 2	Understanding
9	What are the functions of control unit?	BTL 1	Remembering
10	Calculate throughput and response time.	BTL 3	Applying
11	Compose the CPU performance equation.	BTL 6	Creating
12	Measure the performance of the computers: If computer A runs a program in 10 seconds, and computer B runs the same program in 15 seconds, how much faster is A over B?	BTL 5	Evaluating
13	Formulate the equation of CPU execution time for a program.	BTL 6	Creating
14	State the need for indirect addressing mode. Give an example.	BTL 1	Remembering

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15	Show the formula for CPU clock cycles required for a program.	BTL 3	Applying
16	Define Stored Program Concept.	BTL 1	Remembering
17	What are the various units in the computer?	BTL 1	Remembering
18	Compare multi-processor and uniprocessor.	BTL 4	Analyzing
19	Classify the instructions based on the operations they perform and give one example to each category.	BTL 3	Applying
20	Consider the following performance measurements for a program Which computer has the higher MIPS rating	BTL 5	Evaluating

Measurement	Computer A	Computer B
Instruction Count	10 billion	8 billion
Clock rate	4GHz	4GHz
CPI	1.0	1.1

PART B

1	Evaluating the various techniques to represent instructions in a computer system.	(13)	BTL 5	Evaluating
2	i)List the various components of computer system and explain with neat diagram ii)List the classes of applications of computers	(8) (5)	BTL 1	Remembering
3	i)What is an addressing mode in a computer? ii)Describe the MIPS addressing modes with suitable examples to each category	(4) (9)	BTL 1	Remembering
4.	i)Identify the various operations in computer system. ii)Examine the operands of computer hardware.	(6) (7)	BTL 1	Remembering
5	i)Discuss the logical operations and control operations of computer. ii)Explain the concept of Arithmetic operation with examples	(7) (6)	BTL 2	Understanding
6	Consider three different processors P1, P2, and P3 executing the same instruction set. P1 has a 3 GHz clock rate and a CPI of 1.5. P2 has a 2.5 GHz clock rate and a CPI of 1.0. P3 has a 4.0 GHz clock rate and has a CPI of 2.2. i) Which processor has the highest performance expressed in instructions per second?	(3)	BTL 4	Analyzing

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17/05/19

Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 80098

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2019

Fourth Semester

Computer Science and Engineering

CS 8491 – COMPUTER ARCHITECTURE

(Common to Information Technology/Computer and Communication Engineering)

(Regulation 2017)

Time : Three hours | Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define Amdahl's law.
2. Suppose that we are considering an enhancement to the processor of a server system used for Web Serving. The new CPU is 10 times faster on computation in the Web serving application than the original processor. Assuming that the original CPU is busy with computation 40% of the time and is waiting for I/O 60% of the time, what is the overall speedup gained by incorporating the enhancement?
3. Convert $(1.00101)_2$ to decimal.
4. Perform subtraction by two's complement method : 100 – 110000.
5. Convert the following code segment in C to MIPS instructions, assuming all variables are in memory and are addressable as offsets from $t0:

   $a = b + e;\quad c = b + f;$
6. Write down the five stages of instruction executions.
7. List the four multicore systems.
8. What is shared memory multiprocessor?
9. Draw the basic structure of a memory hierarchy.
10. How many total bits are required for a direct-mapped cache with 16KB of data and 4-word blocks, assuming a 32-bit address?

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PART B (5 × 13 = 65 marks)

11. (a) (i) Describe the different types of addressing mode with example. (7)

(ii) Explain the components of a computer with the block diagram in detail. (6)

Or

(b) (i) Explain the eight ideas of the Computer architecture which empowered the computer design over the past decades. (7)

(ii) Tabulate the difference between the RISC and CISC processor. (6)

12. (a) Calculate the following problems using BOOTH'S ALGORITHM (13)

(i) (+13) × (–6)

(ii) (+13) × (+6)

(iii) (–13) × (–6)

(iv) (-13) × (+6)

Or

(b) Calculate 10011 (–13) × 01011 (+11) using Signed-Operand Multiplication. (13)

13. (a) Explain the basic MIPs implementation with necessary multiplexers and control lines. (13)

Or

(b) Explain how the instruction pipeline works? What are the various situation where an instruction pipeline stalls? Illustrate with an example. (13)

14. (a) Explain in detail Flynn's classification of parallel hardware. (13)

Or

(b) Discuss the principle of hardware multithreading and elaborate its types. (13)

15. (a) Explain the various mapping functions that can be applied on cache memories in detail. (13)

Or

(b) (i) With a neat sketch explain the working principle of DMA. (8)

(ii) Explain about input-output processor (IOP) (5)

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PART C (1 × 15 = 15 marks)

16. (a) In a small town, there are three temples in a row and a well in front of each temple. A pilgrim came to the town with certain number of flowers.

Before entering the first temple, he washed all the flowers he had with the water of well. To his surprise, flowers doubled. He offered few flowers to the God in the first temple and moved to the second temple. Here also, before entering the temple he washed the remaining flowers with the water of well. And again his flowers doubled. He offered few flowers to the God in second temple and moved to the third temple. Here also, his flowers doubled after washing them with water. He offered few flowers to the God in third temple.

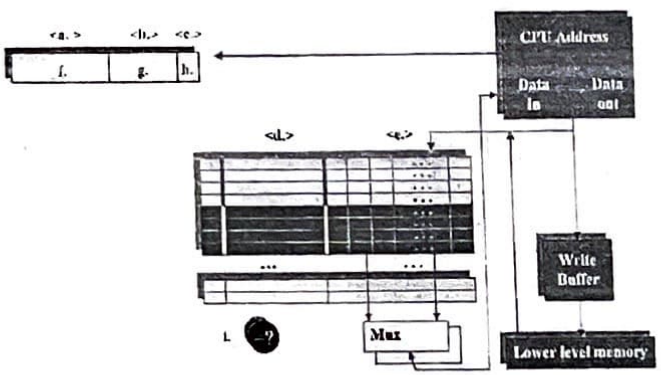
There were no flowers left when pilgrim came out of third temple and he offered same number of flowers to the God in all three temples. What is the minimum number of flowers the pilgrim had initially (X)? And find the value of (X/3) using Restoring Division method? How many flower did he offer to each God (Y)? And find the value of (Y/3) using Non-Restoring Division method? (15)

Or

(b) (i) You have been asked to design a cache with the following properties : (8)

(1) Data words are 32 bits each
(2) A cache block will contain 2048 bits of data
(3) The cache is direct mapped
(4) The address supplied from the CPU is 32 bits long
(5) There are 2048 blocks in the cache
(6) Addresses are to the word.

(ii) In the below picture, there are 8 fields (labeled a, b, c, d, e, f, g, and h), you will need to indicate the proper name or number of bits for a particular portion of this cache configuration. Explain the process of accessing data using this design. (7)



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Department of Computer Science and Engineering

MSEC/ACD/CSE/EVEN SEM-2021-2022/CCM **Date**: 23.03.2022

Class Committee Meeting Schedule for Even Semester 2021 – 2022

The Class committee meeting will be held on the following below mentioned dates for the academic year 2021 – 22 Even Semester for II, III and IV year students. All the subject handling staffs and student committee members are requested to attend this meeting for above mentioned dates without fail.

Venue: CSE HOD Room

S.No	Year	Tentative Dates		
		Meeting 1	Meeting 2	Meeting 3
1	II Year	26.03.2022	20.04.2022	18.05.2022
2	III Year	26.03.2022	20.04.2022	18.05.2022
3	IV Year	28.03.2022	20.04.2022	18.05.2022

HOD

Head – Students Affairs

29/3/22
Head – Academics

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Department of Computer Science and Engineering

MSEC/ACD/CSE/EVEN SEM-2021-2022/CCM-1

Date: 30.03.2022

Submitted to the Head – Academics

Madam, this is for your kind information that the following students are selected as class committee student members for IV CSE. The class committee meeting will be held on 01.04.2022 in HoD Room at 12.30 pm.

Convener: Dr.S.Boobalan
Head – Student Affairs

Chairperson: Dr.M.Vijayaraj
HOD / CSE

CLASS COMMITTEE STUDENT MEMBERS :

Class: IV Year CSE **Semester:** 08

S.No	Register No.	Name of The Student	Signature
1	911518104002	Abdhullah M	
2	911518104007	Arsath Ali J	
3	911518104023	Premkumar M	
4	911518104026	Sheik Abdullah N	
5	911518104302	Shaik Fareed M	

CLASS COMMITTEE STAFF MEMBERS:

S.No	Subject Code	Subject Name	Name of The Staff	Signature
1	CS8085	Social Network Analysis	Mr.M.Mohamed Sithik	
2	CS8080	Information Retrieval Techniques	Mr.S.Ramamoorthi	

FACULTY ADVISOR

HOD

30/3/22
CONVENER

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Department of Computer Science and Engineering

MSEC/ACD/CSE/EVEN SEM-2021-2022/CCM/MoM-1 **Date:** 01.04.2022

Submitted to the Head – Academics

Madam, Class committee meeting was conducted on 01.04.2022 in CSE HoD Room. Faculty members who are handling the classes for Final Year (VIII Semester) CSE and class committee student members were participated. Various academic development activities were discussed for the welfare of the student's community. Herewith, the Minutes of Meeting is submitted for your kind information.

MINUTES OF MEETING

Members Present:
Convener: Dr.S.Boobalan
Head – Student Affairs

Chairperson: Dr.M.Vijayaraj
HOD / CSE

S.No	Subject Code	Subject Name	Name of The Staff	Signature
1	CS8085	Social Network Analysis	Mr.M.Mohamed Sithik	
2	CS8080	Information Retrieval Techniques	Mr.S.Ramamoorthi	

Students Present:

Class: IV Year CSE **Semester:** 08

S.No	Register No.	Name of The Student	Signature
1	911518104002	Abdhullah M	
2	911518104007	Arsath Ali J	
3	911518104023	Premkumar M	
4	911518104026	Sheik Abdullah N	
5	911518104302	Shaik Fareed M	

Minutes:

- Discussed the Syllabus Coverage of each subject.
- Discussed about difficulties faced by students in the class rooms.
- Discussed about importance of Value Added Courses
- Students asked to conduct Soft Skills Training Programs.
- Students asked for arranging On Campus Interview regarding placement.
- Students asked to permit for Indoor Project within our college campus.
- Students asked to permit for Industrial Visit in various places.

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01/4/22

FACULTY ADVISOR HOD CONVENER

Department of Computer Science and Engineering

MSEC/ACD/CSE/EVEN SEM-2021-2022/CCM/AP-1

Date: 04.04.2022

SUBMITTED TO THE HEAD – ACADEMICS

Madam, Class committee meeting was conducted on 01.04.2022 in CSE HoD Room. Faculty members who are handling the classes for Final Year (VIII Semester) CSE and class committee student members were participated. Various academic development activities were discussed for the welfare of the student's community. Herewith, the Action Plan is submitted for your kind information.

ACTION PLAN

- Faculty members are advised to complete the syllabus in prescribed time.
- Faculty Members are advised to give important notes to the students.
- Students are advised to take more caution on internal assessment examinations to improve their internal Marks.
- Faculty Members are advised to maintain the Log book for VAC classes.
- HOD has forwarded to the Head Academics regarding arrangements of Soft Skill Program.
- HOD has forwarded to the Research Head regarding Indoor Project.
- HOD has forwarded to the Head-Student Affairs for planning Industrial Visit.

HOD

04/4/22
CONVENER

HEAD-ACADEMICS

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KILAKARAI - 623 806.

Mohamed Sathak Engineering College
Kilakarai – 623 806
Department of Computer Science and Engineering

Student's Feedback Form

Batch: 2021-2022 **Year:** IIIrd **Section:** ' **Semester:** 06 **Date:** 12.3.22

Fill out this form as thoroughly and honestly as possible. Your response will be extremely valuable that influence the teaching in future.

Rating Points	Description
1	The Worst You have ever seen
2	Very Poor
3	Poor
4	Below expectation
5	Average

Rating Points	Description
6	Just met your expectation
7	Good
8	Very Good
9	Excellent
10	The best you have ever seen

Characteristics of Teaching	Subject Codes					
	CS6601	IT6601	CS6660	IT6502	CS6659	IT6T02
1.Planning and Organisation						
1.1 Punctuality of the Teacher	10	10	10	10	10	10
1.2 Planning of the Lecture i.e.) Aim / Objectives made Clear	9	10	10	9	9	9
1.3 Subject topics organized in sequence	9	10	10	10	9	10
Total (1)	28	30	30	29	29	29
2. Presentation and Communication						
2.1 Audibility of Speech and Visibility of Writing	9	9	10	10	9	10
2.2 Clear explanations with proper examples	9	9	10	10	10	10
Total (2)	18	18	20	20	19	20
3. Student's Participation						
3.1 Encourages questions during Lecture	7	8	9	9	9	9
3.2 Encourages Seminars and problem solving ability in the class	7	10	10	10	9	10
Total (3)	14	18	19	19	18	19
4. Class Management and Assessments of Students						
4.1 Maintaining discipline while engaging classes.	9	9	10	10	10	10
4.2 Syllabus Completion	10	10	10	8	9	10
4.3 Evaluating answer scripts in fair and impartial manner	10	10	9	9	8	10
Total (4)	29	29	29	27	27	30
Overall Performance of Staff Total(1) + Total(2) + Total(3) + Total(4)	89	95	98	95	93	98

General comments about the Department and College

Dr. M.Vijayaraj M.E.,Ph.D.,MISTE.,MIE.,
Professor & Head
Department of Computer Science and Engineering
Mohamed Sathak Engineering College
Kilakarai - 623 806.

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KILAKARAI - 623 806

MOHAMED SATHAK ENGINEERING COLLEGE

KILAKARAI, RAMANATHAPURAM DIST.

Approved by AICTE, COA New Delhi, DGS Mumbai, Affiliated to Anna University, Chennai.
(Sponsored by Mohamed Sathak Trust, Chennai - 08.)

NAAC ACCREDITED | NBA NATIONAL BOARD OF ACCREDITATION ACCREDITED

Department of Computer Science and Engineering

Class: IV CSE
Semester: VIII

BATCH: 2018-2022

Project Details with Guides

S.No	Reg. No	Student Name	Title of the Project	Domain	Name of Supervisor
1	911518104001	Aafrin Firthouse S	Human Pose Estimation Approach using convolutional Neural Network Classification for GAIT Analysis	Neural Network	Dr.T.Sheik Yousuf Professor/CSE
	911518104028	Sineha V			
2	911518104002	Abdhullah M	Low Complex Multi-Authentication protocol for Resource constraint M2M Communication in IoT	IoT	Mr.S.Faizal Mukthar Hussain AP/CSE
	911518104004	Ajayeswaran A			
	911518104007	Arsath Ali J			
3	911518104005	Alwin Arockiam A	Security Provisioning in Multi Hop Body Area Network Cloud Assisted Authentication and Physical Unclonable Function	Security in Cloud Computing	Mr.S.Ramamoorthi AP/CSE
	911518104012	Hari Krishnan G			
	911518104013	Ilaiyaraja T			
4	911518104008	Arun Kumar I	Monitoring System Using Internet of Things	IoT	Dr.V.Balamurugan ASP/CSE
	911518104009	Davood Khan K			
	911518104301	Ascik M			
5	911518104010	Fazil Mohamed S	Light weight Secure Data Sharing scheme for Mobile Cloud Computing	Cloud Computing	Dr.B.Rasina Begam ASP/CSE
	911518104023	Premkumar M			
	911518104302	Shaik Fareed M			
6	911518104014	Koori Prakash P	Smart Control of Traffic Light using Artificial Intelligence and Image Processing	AI & Image Processing	Dr.M.Vijayaraj Prof. & Head/CSE
	911518104026	Sheik Abdullah N			
	911518104017	Mohamed Faizal J			
7	911518104016	Manoj kapilan S	Novel Performance Firework Algorithm for Task Scheduling in IoT-Fog- Cloud Environment	IoT	Ms.C.Jeyalakshmi AP/CSE
	911518104019	Mohamed Musthak A			
	911518104020	Mohamed Nassaar M			
8	911518104021	Mohammad Bahiyyah	Data Security and Privacy Protection on Govt. Healthcare Cloud using CP-ABE	Security in Cloud Computing	Mr.M.Mohamed Sithik ASP/CSE
	911518104025	Robina Fathima M			
	911518104029	Syed Ali Fathima N			

HOD

Dr. M.Vijayaraj M.E.,Ph.D.,MISTE.,MIE.,
Professor & Head
Department of Computer Science and Engineering
Mohamed Sathak Engineering College
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CERTIFICATE

CENTRE FOR FACULTY DEVELOPMENT

ANNA UNIVERSITY :: CHENNAI - 600 025

.....Dr. M. Vijayaraj, Professor.....

.....Mohamed Sathak Engineering College, Kilakarai.....

took part in the six-day Faculty Development Training Programme on

.....CS 8691 - Artificial Intelligence.....conducted in

ONLINE MODE by the Department of ...Computer Science & Engineering.....

at .....Syed Ammal Engineering College, Ramanathapuram.....

from ....17.01.2022..... to ...22.01.2022.....

N. Yoz
COORDINATOR(S)
with Name.
Dr. N. Kowthaveyas

DIRECTOR
CENTRE FOR FACULTY DEVELOPMENT

REGISTRAR
ANNA UNIVERSITY

PRINCIPAL
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ELECTRONICS & ICT ACADEMY

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL, (T.S.), INDIA

and

Vaagdevi College of Engineering, Warangal

Participation Certificate

This is to certify that....Dr. V.Balamurugan, Associate Professor.....

from....MOHAMED SATHAK ENGINEERING COLLEGE, EAST COAST ROAD, KILAKARAI, RAMANATHAPURAM, 623507, TAMILNADU.....

has participated in a 40-hour Online Faculty Development Programme on **"Design Aspects and IoT Applications in Electric Vehicles"** Sponsored by Ministry of Electronics and Information Technology (MeitY) GoI, organised by E&ICT Academy, NIT Warangal and Vaagdevi College of Engineering, Warangal District during 28th February - 9th March, 2022.

She / He has successfully completed all the requirements for the completion of the programme.

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Dr. Durga Harl Kiran B	Dr. Prof. K. Prakash	Dr. Srinivasan Pradabane	Prof. R.B.V. Subramaanyam	Prof. N.V. Ramana Rao
Coordinator	Principal	Coordinator	Chief Investigator,	Director

Faculty & Students NPTEL Certificates Samples

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22CH17S43861149

To
SHANMUGA PRIYA S P
11
NESAVALAR ST
RAMANATHAPURAM
TAMILNADU - 623501
PH. NO :9842453968

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

SHANMUGA PRIYA S P

for successfully completing the course

Electrochemical Technology in Pollution Control

with a consolidated score of 55 %

Online Assignments	22.5/25	Proctored Exam	32.51/75

Total number of candidates certified in this course: 68

Prof. G. L. Sivakumar Babu
Chairman, Center for Continuing Education
IISc Bangalore

Jan-Mar 2022
(8 week course)

Prof. L. Umanand
NPTEL Coordinator
IISc Bangalore

Indian Institute of Science Bangalore

swayam

Roll No:NPTEL22CH17S43861149

To validate and check scores: https://nptel.ac.in/noc

PRINCIPAL

PRINCIPAL
MOHAMED SATHAK ENGINEERING COLLEGE
KILAKARAI - 623 806.

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22ME56533810263

To
HARIHARAN M
5/12 PALANIVEL PADAIYACHI STREET
TAMIL NADU - 623409
PH. NO :9994731842

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:2
An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

HARIHARAN M

for successfully completing the course

Manufacturing Guidelines for Product Design

with a consolidated score of 63 %

Online Assignments	23.75/25	Proctored Exam	39/75

Total number of candidates certified in this course: 371

Prof. Sanjeev Manhas
Coordinator, Continuing Education Centre
IIT Roorkee

Feb-Apr 2022
(8 week course)

Prof. Priti Maheshwari
NPTEL Coordinator
IIT Roorkee

Indian Institute of Technology Roorkee

swayam

Assessed and Accredited with 'B++' Grade by the

National Assessment and Accreditation Council

Academic Audit Report

2021-2022

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Academic Audit Report of Mohamed Sathak Engineering College held on Monday, 25th July 2022 using the NAAC Parameters

An academic Audit was conducted based on the criterion of the NAAC covering all academic activities of the College. The observations made by the team are mentioned below.

OSRG	**– Academic Audit Report – Criteria wise**
1.1 Curricular Aspects:	
1.1.1 Curricular Planning and Implementation:	**CURICULUM AND SYLLABUS** **Syllabus** is prepared by subject co-coordinator in consultation with experts, taking inputs from external and internal faculty. Based on the feedback the syllabus is finalized, examined by the HOD. HOD presents to the Board of Studies and Academic Council for approval. **Inputs to students are through:** Lectures Chalk & Talk Power Point Presentation Case Study Role Play, simulation, GD etc **The features of the Programmes are:** a. Certificate Courses b. FDP by certified Professionals c. Reference material by learning partners d. Continuous student orientation program e. Industry integrated certificate course f. Train the Trainer Program g. Industry Academia Interface h. Train & Hire Program i. Field visits j. International platform for idea exchange k. Tie up with industrial bodies c. Hospitality Internship

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1.1.1 Curricular Design and Development	1. Syllabus revised by Anna University once in 4 years 2. Process – Inputs are taken from industry. 3. VAC – Value Added Courses made compulsoryand scheduled after college hours. 4. Foreign language classes 5. Corporate internships 6. Skill based papers introduced – C, C++, Java etc., 7. Subject coordinators identify the industry needs while preparing lesson plans. 8. Cases developed by faculty. 9. Shared teaching of one subject by 3 faculty
1.2 AcademicFlexibility:	1. Faculty flexibility in handling number of subjects and participating in add on, value added courses and extracurricular activities 2. Faculty has full freedom to plan and execute these outreach programmes
2.1.3 Curriculum Enrichment:	1. Learning management system introduced and used – Google, Edmodo, and Moodle and onlinewith 24X7 services made available to students. 2. Online interaction through online terminal used effectively. 3. Corporate internship – planned for 4-6 weeks 4. Bridge courses organized a. before regular classes b. Mentoring done. c. Leadership skills development programme planned. d. Extended Outreach programme – 60 hrs.,over 3 years in the form of: a) Social internship. b) Eco clubs C) Skill development: d) Skill mapping and evaluation

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	5. Incubation Centre . 6. Incorporation of changes in industry – to bridge the gap between faculty development programmes both in-house and external (with leave) are conducted.
1.4 Feedback System:	1. Screening of deficiency of students a. Feedback though Feedback form b. Class mentoring – on going process. 2. Design of programme: a. Prior survey of industry sector regarding their requirement is conducted b. Feedback from placement is obtained. c. Feedback from alumni is obtained. 3. Additional skill development: 4. Joint research by faculty and students: done. 5. Inter-disciplinary courses are offered– in the form of open elective. 6. Skill training with field exposure attempted.
2 Teaching-Learning & Evaluation:	
2.2 Catering to Student Diversity:	1. Orientation Program conducted 2. Bridge course & Remedial classes 3. Internships & Placements provided 4. Mentoring & Counselling 5. Recognizing achievements 6. Scholarships provided 7. Guidance &Support for professional exams provided 8. Encourages students who take up competitive exams 9. Enterprise Resource Planning (ERP) implemented 10. Parent Teachers Association meetings held 11. On Job Training provided 12. Entrepreneurship – start-up companies encouraged 13. Corporate – 6 to 8 weeks internship after holidays arranged.

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2.3 Teaching-Learning Process:	1. Process adopted; lectures, case studies, class room participation, assignments, debates among teams on subjects, changes in environment – technological (e- source of information and knowledge), Student presentations. **BEST PRACTICES:** a. Course material – given to students for "self-study" in advance and discussed in the class. This is a time saving method for faculty. b. Demands of future employers are kept in mind while drawing the curriculum. c. Participatory learning methods employed d. Practices shared teaching methods
2.4 Teacher Quality:	1. Subject knowledge of the teacher is sound as per the opinion of the students 2. Faculty are engaged in research and to publish papers and books 3. Faculty evaluation is done periodically by the stake holders 4. Student psychology based on the student SWOT is conducted during admission. 5. Monitoring of discipline and classroom participation of students, 6. Student-wise data of learning – visual, auditory. 7. Use of computerized presentations. 8. Faculty feedback taken every semester 9. Growth opportunity provided by making faculty HOD in every 3 years. 10. Effective utilization of staff. a. Benefit of research / book writing- incentives, non-monetary recognition. b. Routines – avoid teachers in non-academic activities c. Choice to faculty to get involved in non-academic activities 11. Infrastructure - adequate classrooms and other facilities a. I-net speed, 24X7 availability, b. Wi-fi 24X7 availability 12. Incorporation of changes in industry – 13. Programmes are conducted for faculty members both in-house and outside with leave. These programmes are organized to support faculty development.

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2.5 Evaluation Process and Reforms:	Evaluation process. a) Class room interactions b) Tests and exams c) Assignments and presentations Internal assessment : a. We are conducting Three Internal exams and its average will make 20 marks as Internal for university examination b. Industry institution interaction – done by placement and not by department head. University assessment : a. Internal Assessment Test – 20 + End Semester Examination (ESE)- 80 = 100. b. Minimum 2 assignments
2.6 Student Performance and Learning Outcomes:	**Student oriented initiatives** are: a) Students seminars and workshops b) Student exchange programmes. c) Introduced CBCS d) Orientation e) Bridge courses f) Mentoring and counseling by full time faculty g) Certificate courses. h) Recognize achievements – scholarships from state, central and Alumni **STUDENT FEEDBACK** a) Expectations met by the institution b) Academics – excellent c) Flexibility offered.

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	d) We come prepared – 30% we need to study, subject to numerical or theory subject. e) Challenging assignments f) Good admission policy g) Fee structure – no grievance h) Infrastructure – Wi-fi and transportation i) Library timings – no concerns were raised j) Certificate, Add-on courses – adequate k) Placement – commendable
Research, Consultancy & Extension:	
3.1 Promotion of Research:	• **Total No. of Ph. D Scholars (Faculty) : 41** **No. of Ph. D Scholars (Faculty) Registered: 19** **PLANNED FOR** 1. DST funded projects 2. Student Research: guiding them to choose the subject, conducting and reporting process. 3. Research Initiatives a. For faculty – i. leave for PhD, ii. book writing
a) Research Facilities:	• Institute has a well-planned library and internet facility to cater to the needs of research. • Adequate facility for research scholars • Online journal/E-content available • Extended library timings

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b) Research Publications and Awards:	**Publications of MSEC** Seminar Compendiums
a) Consultancy:	Civil Department
b) Extension Activities and Institutional Social responsibility:	1. Leadership is encouraged among students by outreach programmes to inculcate: a. Social concern b. Character building 2. Participation is mandatory – 60 hrs., credit
c) Collaborations	1. Collaboration with –Jet Aerospace Aviation Research centre, Prime tech Instruments etc., 2. Interactive academic partners – NIT Trichy 3. Encouragement to faculty members to take-up more funding projects
4. Infrastructure and Learning Resources:	
4.1 Physical Facilities:	Institute has a well-designed environment friendly class rooms and conference rooms. There is ample facility for indoor and outdoor games.
4.2 Library as a Learning Resource:	Has library with latest editions of volumes of books
4.3 IT Infrastructure	Wi-Fi campus, provides free access to faculty and students.
4.4 Maintenance of Campus Facilities:	Hygienically maintained campus.
5 Student Support and Progression:	
5.1 Student Mentoring and Support:	**COUNCELLING**: 1. SWOT at entry level

	2. Identification of slow learning students 3. Remedial measures taken, suggests remedies for non-performers. a. Observation b. Questionnaire c. Work on weaknesses 4. PTA – parent teacher association
5.2 Student Progression:	1. Incubation Centre 2. NSS for students
2.5.3 Student Participation and Activities:	The sports department of the college has always provided ample opportunities for students to participate in sports and games that are physically wholesome, mentally stimulating and socially sound. Indoor games area - Gym, Table tennis – Carom – and others. Outdoor Games – Basketball, volley ball, cricket, hockey The college has produced athletes and sports persons of National and International repute. The Playground and facilities are adequate STUDENT SUPPORT • Scholarship • Breakfast & Snacks • TA & DA • Awards • Concessions are provided to sports persons **Social and cultural activities organized are:** 1. Adoption of Govt. schools 2. Leadership & Rural Camps 3. Seminars, lectures, workshops on social issues 4. Blood donation camps 5. Cleanliness drives, awareness campaigns & recycling projects 6. Reaching out to communities in distress and at times of emergencies 7. Major Projects in the Past 5 Years

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	a. 35 Rural Exposure Camps conducted b. 8 Leadership & Cultural Camps conducted c. 8 Blood Donation Camps conducted 8. Business Associations a. E-Cell – Entrepreneurship Cell 9. Cultural & Language Associations a. Association for Literature, Music & Arts b. Women's Forum
6. Governance, Leadership and Management:	
6.1 Institutional Visionand Leadership:	1. Vision statement is clear and noble • To achieve academic excellence with social concern • Institute supports students from marginalized and poor segments of society 2. Investment on faculty: a) Conduct faculty development programmes in line with the demand b) **Faculty hiring policy** is strictly followed- based on the need identification by the Vice Principal, based on workload, and in consultation with external subject experts. c) Fresh faculty have to give a demonstration lecture and the observers submit a confidential report to Principal. d) Principal makes the decision based on qualification, experience and remuneration. e) **Faculty motivation policy**: encourage for higher studies with 1 year leave

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	and 50% salary given. For M.Phil., 30% of fee is reimbursed. f) Deputation to nation g) 8/nal seminars, workshops by universities and educational institutions encouraged h) Faculty attrition is minimal
6.2 Strategy Development and Deployment	Admission policy: Inclusivity promotion i. Admission Committee approved by the Management looks into the admission policy ii. General merit – 90% marks in the qualified examination. iii. Minority merit - 60 % marks in the qualified examination. iv. Sports – 47%. New Programme: • B.Tech (Artificial Intelligence & Data Science) • B.Tech (CSBS) PLACEMENT: • No Full-time placement officer – full time faculty given additional responsibility.
Faculty Empowerment tegies: - Faculty development initiatives - Support staff development initiatives - Student development initiatives	Faculty empowerment: a) Full autonomy to HODs. b) Right faculty choice – from external sources with remuneration flexibility. c) Faculty encouraged to attend external programmes d) HODs prepare budget – academic expenses pertaining to their departments. e) Industry – institute interface programmes were organized – did not yield expected results. f) Moulding students to corporate values, responsible citizens and attitude development programmes. g) MST Scholarships.

6.4 Financial Management and Resource	1. Finance Committee looks into the financial management 2. Budgeting: No deficit is allowed 3. Revenue & disbursement: a) Infrastructure b) Scholarships – (one time)Rs. 8000 to Rs 40,000 c) Alumni fund- return gratitude, 500 to 1000 notebooks Fee structure: 25% excess to take care of exigencies.
2.6.5 Internal Quality Assurance System:	Monitoring system: Have a structured system to monitor outcome of courses, value added courses. • IQAC is proactive in innovating curriculum on a regular basis. • Faculty performance is evaluated effectively • Student performance is evaluated effectively • New system of arriving at "Employability Index" – which is a competency measurement done to PG students. UG yet to be done. • Collaboration with foreign institutions to be explored. • Remedial classes for students admitted under 3 categories of percentage of marks in the qualified examination. • Students with 95% marks – involved in student research • Students with 65% and 45%- have 10 days course in Mathematics before the regular classes start and also 10 days before the examination are conducted.
Section III: OVERALL ANALYSIS: Observations	
3.1 Institutional Strengths:	• Sound and value based Management, • Efficient Administration, • reasonably good infrastructure, • Committed Faculty,

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	• High Brand equity, • Industry based contemporary Curriculum, • Good placement record, • Undivided focus as it is an exclusive Commerce College • Good quality of students • Automation • strong Alumni • High degree of community intervention. • Skill based education introduced – C, C++, Java. Phython, Etc., • Collaboration with – Aerospace Aviation Research centre, Prime tech Instruments Interactive academic partners – NIT, Trichy
3.2 Institutional Weakness	• Industry interface, • Lack of research orientation in curriculum, • Limited space for academic expansion, • Exit policy of the govt .in recruitment of aided faculty , • Lack of consultation, • No full-time office for placement – full time faculty given additional responsibility • Routines take over academic work • Digital library • Internet – 24X7 provisions. • Limitation – for inter-disciplinary course • Skill training without field exposure has little value.
3.3 Institutional Opportunities:	• To become a university Faculty and student exchange

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	• New programmes, choice of electives, dual electives • PG Courses in Management, • Industry institution interface cell • Collaboration with foreign universities for offering joint programmes • Research and exchange programmes • Enhance research activities
3.4 Institutional Challenges:	• Coping with Changing policies of the government • Competition from private Universities and Colleges, handling modern students in discipline • Faculty retention • Financing academic development • Space for expansion • Academic excellence in line with changing domestic and global employers' demands

Recommendations for Quality Enhancement of the Institution:

1. Investment in Infrastructure for future expansion in University status
2. Research –
   - Research Centre: Create a corpus fund to support research activity.
   - Encourage faculty to take up more of funded projects.
   - Create on-line research repository for MSEC.
   - Introduction of Research projects at DST level
3. Placement:
   - Dedicated placement cell with a professional heading the cell.
   - To Create a student progression dairy to include:
   - Student transformational index
   - Student competency mapping.

4 All the activities planned by various departments, under various criteria are to be measured and quantified.

a. Library –to become digital and increase the seating capacity

5. Seeking collaboration with Institutional funding agencies for projects.
6. Collaboration with other Industry Bodies .
7. Benefits for research and book writing to be relooked by the faculty
8. More and more skill components to be added in the Curriculum

Prepared by **Approved by**

M.Mohamed Rafi	**Dr.E.Dhiravidachelvi**	**Dr.D.Alagia Meenal**	**Dr.N.Mohamed Sheriff**
IQAC COORDINATOR	**Member Secretary**	**Member Secretary**	**President**

ACADEMIC & ADMINISTRATIVE AUDIT

2021-2022

Action Taken Report

Introduction

The institution conducted an Academic and Administrative Audit in 2021-2022 covering academic, administrative and student centric activities of the College. Below mentioned actions were executed for quality enhancement of the Institution

Sl. No.	Suggestions	Action Taken
1.	Encourage faculty to take up more funded projects.	Management sponsored projects undertaken by faculty increased as a result of continuous orientation and support. Research Policy created.
2.	Create on-line research repository.	Promotion of Online Research repository' at the institution.
3.	Introduction of Research projects even at UG level	Introduction of Research projects at UG level. Undergraduate students are mentored to take up small research projects.
4.	To Create a student progression dairy.	Student progression diary created through ERP to facilitate tracking of students' progression and transformational index. Mentorship files aligned with the same.
5	Student competency mapping for student's progression.	The Placement cell and the Post-Graduation Departments organize student competency mapping sessions to identify the capability and interest levels of individual students.

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6	Collaboration with other Industry Bodies	The college has promoted collaboration with many Industry Bodies like Aerospace Aviation Research centre, Prime tech Instruments etc., both at National & International levels by signing MOU's.
7	Research and book writing to be relooked by the faculty	Faculty orientation and support provided for undertaking more research including book writing.
8	Linking MSEC Research Centre with others	Exploring the possibilities of collaboration with some reputed research institutions.
9	More skill components to be added in the Curriculum	Compulsory skill-based papers incorporated in the Curriculum.

On the basis of the suggestions given by the Academic and Administrative Audit Team.

Conclusion

Thus, required action has been taken on the basis of the suggestions given by the AAC team for quality enhancement of the institution.

IQAC COORDINATOR

Principal

ATTESTED

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