7.2 Revamped Teaching Learning (RTL) Process

INDEX

Sl No.	Different RTL Process	Proof
1	Mentoring System	• Circular-Allotment of Mentors • Department Approved Mentor List • Mentoring & Academic Performance record-Blank Copy • Mentoring & Academic Performance record-Filled Copy • Mentoring report
2	Addon Course	• Proposal • Addon Course List • Calendar • Namelist • Syllabus • Certificate Sample
3	Competitive Exam	• List of Students Qualified • Certificates

INDEX

Jyothi Engineering College

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A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

JYOTHI HILLS, VETTIKATTIRI P.O, CHERUTHURUTHY, THRISSUR, PIN-679531 PH : +91- 4884-259000, 274423, FAX : 04884-274777

NBA accredited B.Tech Programmes in Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering valid for the academic years 2018-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.

JEC/2/A/25/20   20/11/20

CIRCULAR

Allotment of mentors for the academic year 2020-21

All HoDs are directed to allot mentors from the respective department for the academic year 2020-21 by 26/11/20.
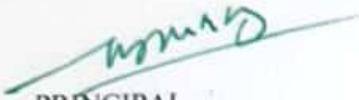
PRINCIPAL

To

All HODs

Copy to

ADM/ AAs
File

Jyothi Engineering College

NAAC Accredited College with 5 NBA Accredited Programmes

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A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

JYOTHI HILLS, VETTIKATTIRI P.O. CHERUTHURUTHY, THRISSUR, PIN 679531 PH: +91-4884-259000, 274423 FAX: 04884 274177

NBA accredited B.Tech Programmes in Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering valid for the academic years 2016-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.

MENTORS LIST 2020-21

The following faculty members are assigned as the mentors in Electrical & Electronics Engineering Department

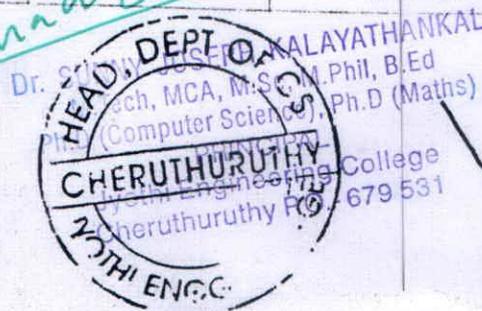| Sl.NO	Name of Faculty	Semester	Admission Batch	Reg No of students
1	Ms.Viji	S1/S2	2020	JEC20EE001-JEC20EE0010
2	Mr.Kapildas K.S	S1/S2	2020	JEC20EE011-JEC20EE0021
3	Mr.Jenson Jose	S3/S4	2019	JEC19EE001-JEC19EE0013
4	Ms.Anu Sunny	S3/S4	2019	JEC19EE014-JEC19EE0026
5	Mr.Jithin K Jose	S5/S6	2018	JEC18EE001-JEC18EE014
6	Dr.Nisha P.V	S5/S6	2018	JEC18EE015-JEC18EE027
7	Mr.Akhil A Balakrishanan	S7/S8	2017	JEC17EE020-JEC17EE044
8	Mr.Della David	S7/S8	2017	JEC17EE001-JEC17EE019
9	Ms.Aswathy Rajan	S1-M-Tech	2020	JEC20EEPE01-JEC20EEPE04

Dr. Jarin T. MBA,MSW,ME,PhD
HEAD OF THE DEPARTMENT
ELECTRICAL & ELECTRONICS ENGG.
JYOTHI ENGINEERING COLLEGE
CHERUTHURUTHY, THRISSUR - 679 531

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A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR
JYOTHI HILLS, VETTIKATTIRI P.O. CHERUTHURUTHY, THRISSUR. PIN-679531 PH : +91- 4884-259000, 274423 FAX : 04884-274777

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Mechanical Engineering valid for the academic years 2016-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022

MENTORS LIST 2020-21

The following faculty members are assigned as the mentors in Computer Science & Engineering department.

Sl.NO	Name of Faculty	Semester	Admission Batch	Reg No of students
1	Ms. Lufiya George C	S1 B-Tech -A	2020-24	JEC20CS001- JEC20CS021
2	Fr. Sijo Cheruvathoor	S1 B-Tech -A	2020-24	JEC20CS022- JEC20CS042
3	Mr. Sivakumar K.S.	S1 B-Tech -A	2020-24	JEC20CS043- JEC20CS063
3	Ms. Ninu Francis	S1 B-Tech -B	2020-24	JEC20CS064- JEC20CS085
4	Ms. Nivya Wilson	S1 B-Tech -B	2020-24	JEC20CS086- JEC20CS106
	Ms. Suganthi Suresh	S1 B-Tech -B	2020-24	JEC20CS106- JEC20CS126
5	Ms. Sajitha I	S3 B-Tech -A	2019-23	JEC19CS001-JEC19CS025
6	Mr. Anil Antony	S3 B-Tech -A	2019-23	JEC19CS026-JEC19CS050
7	Mr. Bineesh M	S3 B-Tech -B	2019-23	JEC19CS051-JEC19CS077
8	Ms. Reshma K.V.	S3 B-Tech -B	2019-23	JEC19CS078-LJEC19CS105
9	Ms. Aswathy S.U.	S5 B-Tech-A	2018-22	JEC18CS001-JEC18CS024
10	Ms. Sobha Xavier	S5 B-Tech-A	2018-22	JEC18CS025-JEC18CS048
11	Mr. Aneesh Chandran	S5 B-Tech-B	2018-22	JEC18CS049-JEC18CS072
12	Ms. Aswathy Wilson	S5 B-Tech-B	2018-22	JEC18CS073-JEC18CS093
13	Ms. Namitha T N	S7 B-Tech-A	2017-21	JEC17CS001-JEC17CS027
14	Mr. Unnikrishnan P	S7 B-Tech-A	2017-21	JEC17CS028-JEC17CS054
15	Mr. Shaiju Paul	S7 B-Tech-B	2017-21	JEC17CS055-JEC17CS085
16	Ms. Swapna B Sasi	S7 B-Tech-B	2017-21	JEC17CS086-JEC17CS106
17	Ms. Aswathy Wilson	S1 M-Tech	2020-22	JEC20CSCE01-JEC20CSCE07
18	Dr. Vinith R.	S3 M-Tech	2019-21	JEC19CSCE01-JEC19CSCE04

Dr. SURJY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
HEAD (Computer Science), Ph.D (Maths)
DEPT
Jyothi Engineering College
Cheruthuruthy P.O, 679 531

Jyothi Engineering College

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A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

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NBA accredited B.Tech Programmes in Computer Science & Engineering, Electronics & Communication Engineering, Electrical & Electronics Engineering and Mechanical Engineering valid for the academic years 2016-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.

MENTORS LIST 2020-21

The following faculty members are assigned as the mentors in Mechatronics department.

Sl.NO	Name of Faculty	Semester	Admission Batch	Reg No of students
1	Ms. Smija Skaria	S1/S2	2020-24	JEC20MC001-JEC20MC023
2	Ms.Neethu Rose	S1/S2	2020-24	JEC20MC024-JEC20MC047
3	Mr.N. Jeyakkannan	S3/S4	2019-23	JEC19MC001-JEC19MC023
4	Ms. Bindhu K Rajan	S3/S4	2019-23	JEC19MC024-JEC19MC045
5	Ms. Nyni K A	S5/S6	2018-22	JEC18MC001-JEC18MC020
6	Mr. Hareesh N V	S5/S6	2018-22	JEC18MC021-JEC18MC040
7	Mr. Jinesh K J	S7/S8	2017-21	JEC17MC001-JEC17MC020
8	Ms. Sowmya C	S7/S8	2017-21	JEC17MC021-JEC17MC040

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Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
PRINCIPAL
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Cheruthuruthy P.O.- 679 531

HOD – MR

Dr. VIVEK LUKOSE, M.Tech, PhD
Head-Dept. of Mechatronics Engineering
Jyothi Engineering College
Thrissur - 79 531

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Mechanical Engineering valid for the academic years 2016-2022. NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.

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MENTORS LIST 2020-21

The following faculty members are assigned as mentors in Civil Engineering department.

Sl.No	Name of Faculty	Semester	Admission batch	Reg. No of students
1	Mr. Rich K J Ms. Anju M J	S1/S2	2020	JEC20CE001 -JEC20CE017 JEC20CE018- JEC20CE034
2	Ms. Jisha Akkara Mr. Parthiban P	S3/S4	2019	JEC19CE001- JEC19CE018 JEC19CE019 - LJEC19CE037
3	Dr Agnes Anto C Ms. Neeraja P G	S5/S6	2018	IES18CE028 & JEC18CE001- JEC18CE024 JEC18CE025 - JEC18CE051
4	Ms. Archana S Dr. Alwyn Varghese	S7&/S8	2017	JEC17CE001-JEC17CE032 JEC17CE033-JEC17CE046
5	Dr. Athiyappan	S1/S2 M-Tech	2020	JEC20CETE01- JEC20CETE12
6	Ms. Carol Varghese	S3/S4 M-Tech	2021	JEC19CETE01 - JEC20CETE15

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Dr. SUNNY JOSEPH KALAYATHANKAL
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Cheruthuruthy P.O -679531

Viny Varghese
HoD-incharge

MENTORS LIST 2020-21

The following faculty members are assigned as the mentors in the Mechanical Engineering department.

Sl. No.	Name of Faculty	Sem.	Admission Batch	Reg. No. of students
1	Anto Zacharias Jasmin Jose	S1	2020-2024	12015001-12015032 12015033-12015065
2	Anto Zacharias Jasmin Jose	S2	2020-2024	NIL
3	Praveen Raj Suneeth Sukumaran	S3	2019-2023	JEC19ME001-JEC19ME036 JEC19ME037-JEC19ME071
4	Praveen Raj Suneeth Sukumaran	S4	2019-2023	JEC19ME001-JEC19ME036 JEC19ME037-JEC19ME071
5	Deepanraj B. Cijil B. John Sukesh O.P. Jithin K. Kuriakose	S5	2018-2022	JEC18ME001-JEC18ME024 JEC18ME025-JEC18ME045 JEC18ME046-JEC18ME065 JEC18ME066-JEC18ME088
6	Deepanraj B. Cijil B. John Sukesh O.P. Jithin K. Kuriakose	S6	2018-2022	JEC18ME001-JEC18ME024 JEC18ME025-JEC18ME045 JEC18ME046-JEC18ME065 JEC18ME066-JEC18ME088
7	Nice Menachery Manoj Kumar V.K. Nisha Sherief Melvinraj C.R.	S7	2017-2021	JEC17ME001-JEC17ME029 JEC17ME030-JEC17ME058 JEC17ME059- JEC17ME087 JEC17ME088- JEC17ME116, JEC16ME003
8	Nice Menachery Manoj Kumar V.K. Nisha Sherief Melvinraj C.R.	S8	2017-2021	JEC17ME001-JEC17ME029 JEC17ME030-JEC17ME058 JEC17ME059- JEC17ME087 JEC17ME088- JEC17ME116, JEC16ME003

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HOD
Department of Mechanical Engineering

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B.Tech, MCA, M.Sc, M.Phil, B.Ed

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MENTORS LIST 2020-21

The following faculty members are assigned as the mentors in Electronics and Communication Engineering department.

Sl.NO	Name of Faculty	Semester	Admission Batch	Reg No of students
1	Ms. Priya Jose	S1/S2	2020-24	JEC20EC001-JEC20EC 021
2	Ms. Ambily Francis	S1/S2	2020-24	JEC20EC022-JEC20EC041
3	Mr. Ponmaniraja M	S3/S4	2019-23	JEC19EC001-JEC19EC013
4	Ms. Annie P. Joseph	S3/S4	2019-23	JEC19EC014-LJEC19EC028
5	Dr.Anoop V	S5/S6	2018-22	JEC18EC001-JEC18EC022
6	Ms. RoshniRajan	S5/S6	2018-22	JEC18EC023-JEC18EC044
7	Dr.Prajoon P	S7/S8	2017-21	JEC17EC001-JEC17EC028
8	Ms. Shiny MI	S7/S8	2017-21	JEC17EC029-JEC17EC056
9	Mr. Dipinkrishnan R	S1 Mtech	2020-22	JEC20ECCP01, JEC20ECCP02

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DEPARTMENT OF E.C.E.
CHERUTHURUTHY
THRISSUR
PIN-679 531
Jyothi Engineering College

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
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Cheruthuruthy P.O

Dr. Jose P. Therattil
M. Tech., Ph.D. (NIT)
Professor & HOD, ECE Department
Jyothi Engineering College
Cheruthuruthy, Thrissur - 679 531

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DEPARTMENT OF ROBOTICS & AUTOMATION ENGINEERING

MENTORS LIST 2020-21

The following faculty members are assigned as the mentors in Robotics and Automation.

Sl.NO	Name of Faculty	Semester	Admission Batch	Reg No of students
1	Mr.Bibin Joy	S1/S2	2020	JEC20RA001-JEC20RA008
2	Dr.C. Karthik	S1/S2	2020	JEC20RA009-JEC20RA016

Dr. VIVEK LUKOSE, M.Tech, PhD
HOD
Head-Dept. of Mechatronics Engineering
Jyothi Engineering College
Cheruthuruthy, Thrissur-679 531

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
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MENTORS LIST 2020-21

The following faculty members are assigned as the mentors in Artificial Intelligence and Data science.

Sl.NO	Name of Faculty	Semester	Admission Batch	Reg No of students
1	Ms.Renju Francis	S1/S2	2020	JEC20AD001-JEC20AD018
2	Ms.Minu Jose	S1/S2	2020	JEC20AD019-JEC20AD036
3	Dr.Aswathy S.U	S1/S2	2020	JEC20AD037-JEC20AD054

HOD
Dr. SAJU.P.JOHN
Professor
Dept. of Computer Science & Engg
Jyothi Engineering College
Cheruthuruthy, Thrissur
Kerala, Pin: 679531

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
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Jyothi Hills, Vettikkattiri P.O., Cheruthuruthy, Thrissur 679 531
Web Site : www.jecc.ac.in, E.mail Id : info@jecc.ac.in

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MENTORING & ACADEMIC PERFORMANCE RECORD

20................ to 20................

Name of the Student   ....

Branch   ....

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
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Cheruthuruthy P.O., 679 5...

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Jyothi Hills, Vettikkattiri P.O., Cheruthuruthy, Thrissur 679 531
Web Site : www.jecc.ac.in, E.mail Id : info@jecc.ac.in

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MENTORING RECORD

20................. to 20.................

Name of the Student : ....

Branch   : ....

Register No   : ....

Admission No   : ....

Year of Admission : ....

Student Details :

Name of the Student:...

Branch:...

Admission No:.....................................

Blood Group:...

Email:..

Register No:.....................................

Year of Admission.........................

Mobile No:.......................................

Adhaar No:......................................
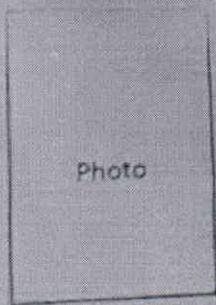
Photo

Parent's/Guardian's Details

Father's Name:...

Phone No:...

Occupation:..

Permanent Address:

Mother's Name:...

Phone No:..

Occupation:..

Contact Address:
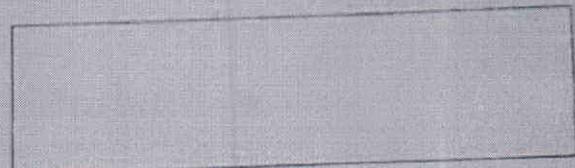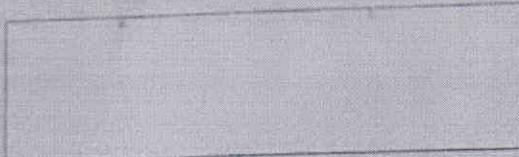
Total Annual Income of Parents:...

Local Guardian's Details :

Local Guardian:.. Siblings and their details:...................

Phone No:..

Address:
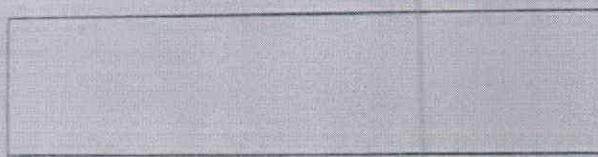
Name of Mentor for First year   :...

Department   :...

History of the Student :

Institution were studied   :..

+2 / Diploma   :..

Percentage of Marks Obtained in PCM/

Diploma/KEAM/LET Rank

Strength of student   :

Weakness of the student:

SEMESTER I

Semester started on .... Name of the Mentor: ....

Student Staying at : Hostel/Home/Lodge Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS								Sign of Mentor
1									
2									
3									
4									
Total									

Percentage of attendance : [ ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1				
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1				
2				
3				

Dr. SUN...
M.Te...
Ph.D (Co...

Jyoti
Cheru...

ATHANKAL
I, B.Ed
D (Maths)

llege
531

3

D. Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1				
2				
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: ....   University Exam Starting Date:...............

Name and Signature of Mentor..

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
HOD
PRINCIPAL
Jyothi Engineering College
Cheruthuruthy P.O.- 679 531

SEMESTER II

Semester started on : ....   Name of the Mentor ....

Student Staying at : Hostel/Home/Lodge   Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS										Sign of Mentor
1											
2											
3											
4											
Total											

Percentage of attendance : [ ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1				
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1				
2				
3				

Dr. SUNNY JOSEPH KALAYATHANKAL
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Ph.D (Computer Science), Ph.D (Maths)
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5

D. Counselling by Mentor/HOD/Counsellor

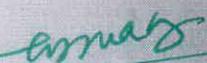| No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1				
2				
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: .... University Exam Starting Date:..............

Name and Signature of Mentor...

Dr. SUNNY JOSEPH KALAYADHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science, Phil. (Maths)
HOD
PRINCIPAL
Jyothi Engineering College
Cheruthuruthy P.O.

6

SEMESTER III

Semester started on : .... Name of the Mentor: ....

Student Staying at : Hostel/Home/Lodge Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
1										
2										
3										
4										
Total										

Percentage of attendance : [   ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1				
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1				
2				
3				

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
PRINCIPAL
Jyothi Engineering College
Cheruthuruthy

D. Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1				
2				
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)
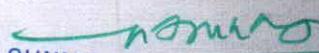
F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: ....   University Exam Starting Date:..............

Name and Signature of Mentor...

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph... (Maths)
HOD
PRINCIPAL
Jyothi Engineering College
Cheruthuruthy P.O.- 679 531

SEMESTER IV

Semester started on ....   Name of the Mentor....................................

Student Staying at   : Hostel/Home/Lodge   Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
1										
2										
3										
4										
Total										

Percentage of attendance   :   [   ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1				
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1				
2				
3				

D. Counselling by Mentor/HOD/Counsellor

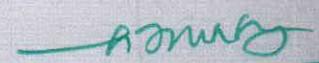| No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1				
2				
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester:.................... University Exam Starting Date:..............

Name and Signature of Mentor...

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M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)   **HOD**
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Cheruthuruthy P.O - 679 531

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SEMESTER V

Semester started on : .... Name of the Mentor: ....

Student Staying at : Hostel/Home/Lodge Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
1										
2										
3										
4										
Total										

Percentage of attendance : [ ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1				
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1				
2				
3				

Dr. SUNNY JOSEPH KALAYATHANKAL
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11

D.   Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1				
2				
3				

E.   Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)
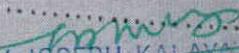
F.   Extracurricular and Co curricular activities of the student:

G.   Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester:...................   University Exam Starting Date:..............

Name and Signature of Mentor...

Dr. SUNNY JOSEPH KALAYATHANKAL
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HOD

SEMESTER VI

Semester started on : ....   Name of the Mentor:.......othi Engineering......

Student Staying at : Hostel/Home/Lodge   Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
1										
2										
3										
4										
Total										

Percentage of attendance   : [ ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1				
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1				
2				
3				

D. Counselling by Mentor/HOD/Counsellor

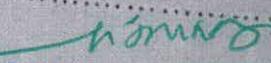| No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1				
2				
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: .... University Exam Starting Date:..............

Name and Signature of Mentor..

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
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Cheruthuruthy P.O.- 679 531

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SEMESTER VII

Semester started on ....   Name of the Mentor:.................................

Student Staying at   : Hostel/Home/Lodge   Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
1										
2										
3										
4										
Total										

Percentage of attendance   :   [   ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1				
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1				
2				
3				

Dr. SUNNY JOSEPH KALAYATHANKAL
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15

D. Counselling by Mentor/HOD/Counsellor

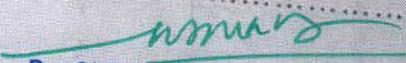| No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/Counsellor
1				
2				
3				

E. **Student Achievements** (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

F. **Extracurricular and Co curricular activities of the student:**

G. **Regularity in the class/Disciplinary actions taken/Any other remarks**

Last working day in this Semester: ....

Name and Signature of Mentor.............................

University Exam Starting Date:...............

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M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
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Jyothi Engineering College
Cheruthuruthy P.O.- 679 531

16

SEMESTER VIII

Semester started on ....   Name of the Mentor:.............................

Student Staying at   : Hostel/Home/Lodge   Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
1										
2										
3										
4										
Total										

Percentage of attendance   :   [   ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1				
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1				
2				
3				

Dr. SUNNY JOSEPH KALAYATHANKAL
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D. Counselling by Mentor/HOD/Counsellor

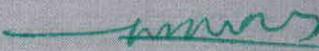| No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1				
2				
3				

E. **Student Achievements** (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

F. **Extracurricular and Co curricular activities of the student:**

G. **Regularity in the class/Disciplinary actions taken/Any other remarks**

Last working day in this Semester: .... University Exam Starting Date:...............

Name and Signature of Mentor..

Dr. SUNNY JOSEPH KALAYATHINKAL **HOD**
M.Tech, MCA, M.Sc, M.Phil, B.Ed
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Cheruthuruthy P.O.- 679 531

18

1st Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
	SGPA					

2nd Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
	SGPA					

3rd Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
	SGPA					

4th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
	SGPA					

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5th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
	SGPA					

6th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
	SGPA					

7th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
	SGPA					

8th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
	SGPA					

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Jyothi Engineering College

Jyothi Hills, Vettikkattiri P.O., Cheruthuruthy, Thrissur 679 531
Web Site : www.jecc.ac.in, E.mail Id : info@jecc.ac.in

MENTORING RECORD

20.16............ to 20..20..........

Name of the Student : ...Manukrishna M A.....

Branch : ....E E E...............

Register No : ...JEC16EE044...........

Admission No : .....116050AH............

Year of Admission : ....2016.................

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1

Student Details :

Name of the Student: Manukrishna MA

Branch: EEE

Admission No: ....

Blood Group: O+ve

Email: ....

Register No: ....

Year of Admission: 2016

Mobile No: 9946726309

Adhaar No: 2478 6997 3099
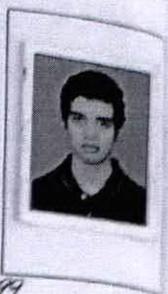
Parent's/Guardian's Details

Father's Name: Anil kumar M.A.

Phone No: 9946726309

Occupation: Govt Servent

Permanent Address:

Muthengaparambil House
kumeranelloor PO Wadakanch-
ery, Thrissur Pin 680590

Mother's Name: Sreeja P.A

Phone No: 9946726309

Occupation: Home maker

Contact Address:

Muthengaparambil House
Kumeranelloor PO Wadakan-
chery Thrissur Pin 680590

Total Annual Income of Parents: 55000

Local Guardian's Details :

Local Guardian: ....

Phone No: ....

Address:

Siblings and their details: ....
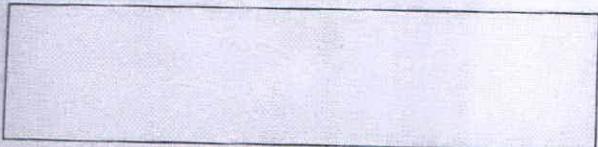
Name of Mentor for First year : S.H.I.JOH. V.

Department : EEE

History of the Student :

Institution were studied
+2 / Diploma : G.H.S.S wadakanchery

Percentage of Marks Obtained in PCM/
Diploma/KEAM/LET Rank

781 / 33863

Strength of student :

Weakness of the student:

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2

SEMESTER I

Semester started on : ..3/8/.16..

Student Staying at : ~~Hostel~~/Home/~~Lodge~~

Name of the Mentor:......SH.I.JO.H.............

Travelling by : ~~College Bus~~ / Private

A. Internal Marks

Exam	MA 101	~~BH~~ 100	BE 100	BE 101-03	BE 103	ME 100				Sign of Mentor
1	18	9	14	8	14	13				
2	16	20	16	10	17	13				
3										
4										
Total										

Percentage of attendance : [   ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1	4/10/4	Anilkumorre		Performance in core subjects found to be poor.
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1	22/8 16	General and Academic (16)		
2	28/9 16	Performance in exam		
3				

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Ph.D (Computer Science), Ph.D (Maths)
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Jyothi Engineering College

3

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D.   Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/Counsellor
1	2/9 6	To improve the marks by attentive study.	*(signature)*	*(signature)*
2	8/1 16	How to prepare for university exams.	*(signature)*	*(signature)*
3				

E.   Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

F.   Extracurricular and Co curricular activities of the student:

BEC Examination

G.   Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: 23/11/2016   University Exam Starting Date: 13/12/2016

Name and Signature of Mentor....... Shijish V. *(signature)*

True Copy Attested *(signature)*

HOD

4

SEMESTER II

Semester started on : 01/02/2017   Name of the Mentor:.... SHIJOH ....

Student Staying at : ~~Hostel~~/Home/~~Lodge~~   Travelling by : ~~College Bus~~ / Private

A. Internal Marks

Exam	\u200b	\u200b	\u200b	\u200b	SUBJECTS	\u200b	\u200b	\u200b	\u200b	\u200b
	MA 102	CY 100	BF 110	BE 102	CE 100	EC 100	CY 110	CE 110	EC 110	Sign of Mentor
1	19	9	30	18	15	12				
2	18	15	40	17	14	7				५ ल्य
3										५ ल्य
4										
Total	47	22	95	76	39	29	82	86	90	५ ल्य

Percentage of attendance   : [   ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1	0/3/2017	Anil kumar M A	[signature]	
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1	1/3/17	About the IsA / Results	[signature]	५ [signature]
2	31/3/17	Various technical activity	[signature]	५ [signature]
3				

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[signature]

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Jyothi Engineering College
Cheruthuruthy P.O.- 679 5...

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D.   **Counselling by Mentor/HOD/Counsellor**

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1	1/3/18	Asked to inform parents to contact and meet tutors.	*(signature)*	*(signature)*
2	5/4/18	Remedial Class attend	*(signature)*	*(signature)*
3				

E.   **Student Achievements** (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

Participated in the science Quiz held as a part of National Science Day 2017

F.   **Extracurricular and Co curricular activities of the student:**

G.   **Regularity in the class/Disciplinary actions taken/Any other remarks**

Last working day in this Semester: 12/5/18 .... University Exam Starting Date: 20/5/18 ....

Name and Signature of Mentor.....Shijah V............. *(signature)*

(signature) J. Thasapil **HOD**

6

SEMESTER III

Semester started on :..1.1.08.1.2017   Name of the Mentor:..Mr...SHIJOH.........

Student Staying at   : Hostel/Home/~~Lodge~~   Travelling by : ~~College Bus~~ / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
	LACA	CN	AE	DCMT	CP	LS	EClab	CPlab		
1	20	13	18	16	17	36				W AW
2	19	19	17	15	14					W AW
3										
4										
Total	50	42	45	40	46	86	77	90		W AW

Percentage of attendance   : [   ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1		M.A. Anilla		
2	6/10/17	M.A. Anil/roose		
3	9/11/17	P.A. Sanja		
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1	2/10 2017	General Matters		
2	7/12 2017	Exam Results.		
3				

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D. Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/Counsellor
1	1/09/17	How to utilise the time for improving for sem	*[signature]*	*[signature]*
2	9/10/17	How to prepare for university exam	*[signature]*	*[signature]*
3				

E. **Student Achievements** (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

Participated in the sixth month program arranged at the college.

F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: 25/11/2017 University Exam Starting Date: 2/12/2017

Name and Signature of Mentor........ Dr. Shijith V. U *[signature]*

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SEMESTER IV

Semester started on : 3-01-2018

Name of the Mentor: Dr Shijob. V

Student Staying at : Hostel/Home/Lodge

Travelling by : College Bus / Private

A. Internal Marks

Exam	PDTN	SIM	DE	MS	MI	BE	EM Lab	CN Lab		Sign of Mentor
1	48	23	43	39	25	41				
2	48	36	38	37	36	39				
3	48	33	42	40	34	42	91	89		
4										
Total										

Percentage of attendance :

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1	16/3/18	Anil kumar. N-U		
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1	4/5 2018	Behaviour in class		
2				
3				

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D. Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1	15/2/18	How to be attentive in class		
2	12/3/18	How to prepare for university exam		
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

Attended a MOOC course in electrical circuit debugging

F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: .... University Exam Starting Date:...............

Name and Signature of Mentor........ Dr. Shijoh. K. ....

SEMESTER V

Semester started on : 2-08-2018

Name of the Mentor: Dr. Shijoh V

Student Staying at : Hostel/Home/~~Lodge~~

Travelling by : ~~College Bus~~ / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
	PG TP	LCS	PE	SS	MPGS	DSD NR	OL LAB	MC LAB II	DP	
1	36	45	31	42	30	33	—	—	—	
2	43	39	40	31	38	37	—	—	—	
3										
4										
Total	45	45	38	40	37	41	74	89	76	

Percentage of attendance : [ ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1	8/9/1	Anil kumar	Sam	
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1	10/11 2018.	General Matters.		
2				
3				

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11

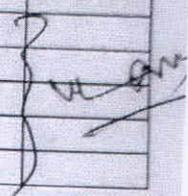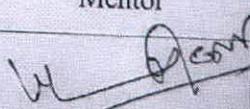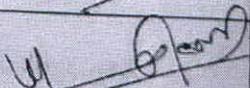**D. Counselling by Mentor/HOD/Counsellor**

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1	15/2/19	How to improve in Academics		
2	15/3/19	Internship		
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

Participated in the tech fest arranged at thejus engineering college

F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: ....

Name and Signature of Mentor...... Dr. ....

University Exam Starting Date: ....

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Ph.D (Computer Science), Ph.D (Maths)
PRINCIPAL
Jyothi Engineering College
Cheruthuruthy P.O.

Dr. Jarin T. MBA,MSW,ME,PhD
HEAD OF THE DEPARTMENT
ELECTRICAL & ELECTRONICS E.GG.
JYOTHI ENGINEERING COLLEGE
CHERUTHURUTHY, THRISSUR - 679 531

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D.   Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1		How to be productive among others.		
2		Communication among others.		
3				

E.   Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

Internship training at 500kv Substation Madakathara for 5 days.

F.   Extracurricular and Co curricular activities of the student:

G.   Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: ....   University Exam Starting Date:..............

Name and Signature of Mentor.....Dr. Shijith V.........................

True Copy Attested

Dr. Jarin T. MBA, MSW, ME, PhD
HEAD OF THE DEPARTMENT
ELECTRICAL & ELECTRONICS ENGG.
JYOTHI ENGINEERING COLLEGE
CHERUTHURUTHY, THRISSUR - 679 531

SEMESTER VI

Semester started on : 28-2-2019 Name of the Mentor: Dr. Shyon V

Student Staying at : Hostel/Home/Lodge Travelling by : College Bus / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
	EM	ACT	PSA	ED	POM	IT	PE&D LAB	S&C LAB	CE	
1	11	16.5	15	14	17	9				
2	9	16.5	9	9	17	15				
3					15	15				
4										
Total	89	53	35	33	853	33	76	78	70	

Percentage of attendance :

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1	5/4/19	Anilkumar. M.N		
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1	28/2/19	General Matters		
2	23/2/19	Exam Results		
3				

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SEMESTER VII

Semester started on : 03-08-2019

Name of the Mentor: Dr. Shijoh V

Student Staying at : Hostel/Home/~~Lodge~~

Travelling by : ~~College Bus~~ / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
	EC	DGSG	ESD	DSP	EMD	PQ	S&PP	POwBY S/m LAB		
1	9	13	12	10	12	15				
2	15	17	13	15	15	11				
3										
4										
Total	33	40	38	35	39	35	87	81		

Percentage of attendance : [ ]

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1	11/10/19	Anil kumar		
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1	07/09/19	Behavior in class		
2	10/10/19	Exam Results		
3				

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D. Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/Counsellor
1		Seminar Preparation		
2		Project		
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

Coordinated the tech fest program event

F. Extracurricular and Co curricular activities of the student:

Got placement at Hexaware Technologies

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: .... University Exam Starting Date:..............

Name and Signature of Mentor....... Dr. Bhgyth V.

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Jyothi Engineering College
Cheruthuruthy P.O - 679...

Dr. Jarin T. MBA,MSW,ME,PhD
HEAD OF THE DEPARTMENT
ELECTRICAL & ELECTRONICS ENGG.
JYOTHI ENGINEERING COLLEGE
CHERUTHURUTHY, THRISSUR - 679 531

SEMESTER VIII

Semester started on : 07-01-2020

Name of the Mentor: Dr. Shijoh. V

Student Staying at : ~~Hostel~~/Home/~~Lodge~~   Travelling by : ~~College Bus~~ / Private

A. Internal Marks

Exam	SUBJECTS									Sign of Mentor
	OEM	IIA	EMA	DM	Project					
1	15	16	17	12						
2	11	15	15	18						
3										
4										
Total	38	52	53	50	87					

Percentage of attendance   :

B. Parent's/Guardian's Visit

No	Date	Name	Signature	Suggestions
1	11-02-20	Anil kumar MA		
2				
3				
4				
5				

C. Discussion with Student (Academic and Personal)

No	Date	Matter discussed/Response	Signature of Student	Signature of Mentor
1	10/01/20	General Matters		
2	11/03/20			
3				

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D. Counselling by Mentor/HOD/Counsellor

No	Date	Advice/Response	Signature of Student	Signature of Mentor/HOD/ Counsellor
1	7/02/000	Chose a proper path		
2				
3				

E. Student Achievements (Industrial Visits, Training, Presentations, Publications, Participations, innovative projects etc.)

Cordinated the tech fest event conducted int thee college

F. Extracurricular and Co curricular activities of the student:

G. Regularity in the class/Disciplinary actions taken/Any other remarks

Last working day in this Semester: ....

University Exam Starting Date:...............

Name and Signature of Mentor ....

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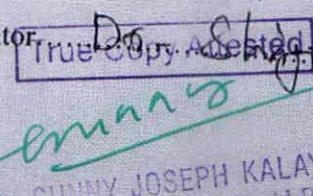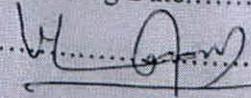
Examination Results

1st Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
PH100	Physics	B				
MA101	Calculus	B+				
BE101·03	Electrical	C				
ME100	Mechanical	C				
BE100	Mechanics	B+				
ME110	Lab Mechanical	B				
PH110	Lab physics	O				
EE110	Lab Electrical	A				
BE103	Sustainable	B				
	SGPA	7.27				

2nd Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
CY100	Chemistry	B				
BE110	Graphics	A+				
CE100	Civil	B				
EC100	Electronics	B				
CY110	Chem.lab	A				
CE110	Civil. lab	A+				
EC1100	Electronics lab	O				
MA102	Maths II	B+				
BE102	Design	B+				
	SGPA	7·83				

3rd Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
MA201	Linear Algebra	C	B			
EE201	Circuits & Network	C	B			
EE203	Analog Electronics	C	B			
EE205	DC Machines	B+				
EE207	Computer Programming	B				
HS210	Life skill	A				
EE231	Electronics Lab	B+				
EE253	Programming Lab	O				
	SGPA	7.00	7·52			

4th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
MA202	Probability Distribution	A+				
EE202	Synchronous Machine	B				
EE204	Digital electronics	B				
EE206	Material science	B+				
EE208	Measurements & Instrumentation	C				
HS200	Business economics	B+				
EE232	Electrical Machine Lab I	O				
EE234	Circuits & Measurement Lab	A+				
	SGPA	7.7				

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5th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
EE501	Power Generation, Transmission & Distribution	B				
EE503	Linear Control System	C				
EE505	Power Electronics	B+				
EE507	Signals & System	B+				
EE509	Microprocessor & Interfacing System	B				
EE525	DSP	A				
EE551	Digital System & Embedded System	B+				
EE553	Electrical Machines Lab II	A+				
EE561	Design Project	B+				
	SGPA	7.59				

6th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
EE302	EM	C	C			
EE304	RCT	C	C			
EE306	PSA	B+				
EE308	ED	C				
HS300	POM	B				
EE366	Illumination	B+				
EE332	CE & Q LAB	B+				
EE355	S & C LAB	B+				
EE352	CE	B				
	SGPA	6.91				

7th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
EE401	Electronic Communication	B				
EE403	DSA	B+				
EE405	Electrical S/m Design	C				
EE407	Digital S/g processing	C				
EE409	Electrical Machine design	B				
EE465A	Power Quality	B+				
EE451	Seminar & Project Preliminary	A+				
EE531	Power System LAB	A				
	SGPA	7.2				

8th Semester

Course No.	Course Title	Gr. 1st Chance	Gr. 2nd Chance	Gr. 3rd Chance		Remarks
EE402	Special Electrical Machine	B+				
EE404	IIA	A+				
EE474	Energy Management & Auditing	A				
EE482	Disaster management	B+				
EE492	Project	A+				
	SGPA	8.58				

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Department of Electronics & Communication Engineering

Mentoring report

Academic and stress related issues raised and solved

Academic Year -2020-2021

Sl.No	Name of the mentor	Issues(Academics/Stress related)	Solution
1	Ms.Roshni Rajan K	Student with reg No. JEC18EC004 find it difficult to follow online classes and was not confident of clearing the university papers.	University question papers were shared among students and informed the student to answer the paper within
2	Dr.Prajoon P	Student with reg no.JEC17EC009 was very concerned about the placement and was unable to clear the Aptitudes test of the placemen drives.Mentor asked the student to attend the aptitudes classes conducted by the college	Got Placement
3		Student with Reg no.JEC17EC002 was very interested for higher studies.	Mentor motivated the student ,joined for higher studies(MTech) .
4	Ms.Shiny M I	Regarding academics,a student with Reg.NoJEC17025 was unable to prepare well and internals marks were poor. Advised him to prepare time table incorparating the suggestion from the concerned faculty.	Secured an average mark in next internal exam.

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Add On Course Details
Academic Year 2020-2021

Name of Add on /Certificate programs offered	Number of students enrolled in the year	Number of Students completing the course in the year
Building Planning and Drawing with Kerala Building Rules	30	30
OOPS concepts in JAVA and algorithm analysis	18	18
Introduction to programming and problem solving in python	20	20
Introduction to Internet of Things	18	18
Image Processing with MATLAB	16	16
Computer Aided Design and Introduction to Solid Works	29	29
Introduction to MATLAB	15	15
NPTEL	139	139

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PROPOSAL FOR ADD-ON COURSE 2020-2021

To meet NAAC requirements (30 hours per course), at least four hours per week is needed for each ADD-ON course

PROPOSAL:-

COURSE STARTING DATE : **07th APRIL 2021 (SIXTH SEMESTER)**

                     : **20th APRIL 2021(FOURTH SEMESTER)**

For ADD-ON course **Building Planning and Drawing with Kerala Building Rules** classes starts on **20/04/2021** (course for both S4 & S6 CE students)

Class Timings   : 8.30am to 12: 30 pm (4 hours per day)

ADDON course Timings : 1.30 pm to 3:30 pm on Tuesdays and Wednesdays

                             (ADD-ON course/Remedial/Soft skill training)

Note

- For S6 contact classes commences on 08/06/2021 and ends on 29/06/2021

- For S4 contact classes starts on 01/07/2021 and ends on 22/07/2021

- **During contact class at least two hours per week for ADD-ON course hands-on session preferably on Tuesdays last two hours.**

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LIST OF PROPOSED ADD-ON COURSES FOR THE ACADEMIC YEAR 2020-2021

No	Dept	Course Title	Staff in Charge	Target Students (Branch Batch)	Registration Fees
1	CE	Building Planning and Drawing with Kerala Building Rules	CE department faculties + External Speaker (6 hours)	S6,S4 CE	RS 500/- REFUND AMOUNT: RS 200/-
2	CSE	OOPS concepts in JAVA and algorithm analysis	Mr. Bineesh M Ms. Sobha Xavier	S4, S6 CSE	RS 300/- REFUND AMOUNT: RS 200/-
3	CSE	Introduction to programming and problem solving in python	Mr. Anil Antony Ms. Reshma K V	S6 ALL Branches	RS 300/- REFUND AMOUNT: RS 200/-
4	ECE	Introduction to Internet of Things	Fr David Nettikkadan	S6 ECE/MR/ CSE /EEE	RS 1000/- Hardware Kit will be provided to students REFUND AMOUNT: RS 200/-
5	ECE	Image Processing with MATLAB	Ms. Bindhu K Rajan	S6 EEE/ ECE/ MR/ CSE	RS 300/- REFUND AMOUNT: RS 200/-
6	EEE	Introduction to VHDL	Mr. Kapil Das K S	S4 CSE, ECE, EEE	RS 300/- REFUND AMOUNT: RS 200/-
7	EEE	Microwave Photonics Structural modelling	Dr. Chirappanath Bazil Albert	S6 ECE	RS 300/- REFUND AMOUNT: RS 200/-
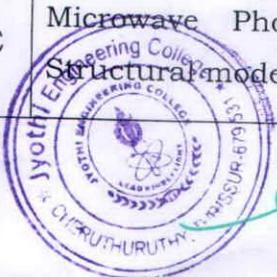
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8	ME	Non-Destructive Testing	External Agency	S6/S8 ME	Will be informed later
9	ME	Computer Aided Design and Introduction to Solid Works	Mr. Christy V Vazhappilly	S4 All branches	RS 300/- REFUND AMOUNT: RS 200/-
10	MR	Introduction to MATLAB	Dr. Rajalakshmi R	S4 EEE/ECE/ MR/ CSE	RS 300/- REFUND AMOUNT: RS 200/-

- For Non- Destructive testing venue and schedule will be informed later
- For Computer Aided Design and Introduction to Solid Works more contact classes are required. Preferably students can come on Saturdays.

Neethu

Neethu Rose Thomas

Add on course coordinator

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CALENDER FOR ADD-ON COURSE - EVEN SEMESTER (2020 – 2021)

On all Tuesdays and Wednesdays starting from 07/04/2021 for S6 and 20/04/2021 for S4.

For ADD-ON course Building Planning and Drawing with Kerala Building Rules classes starts on **20/04/2021 (course for both S6 & S4). There will be separate sessions for S6 & S4 during contact class**

SEMESTER	DATE	HOURS
	ADD-ON course commences on 07/04/2021	2
	13/04/2021	2
	20/4/2021	2
	21/4/2021	2
	27/4/2021	2
	28/4/2021	2
	04/05/2021	2
	05/05/2021	2
	11/05/2021	2
S6	12/05/2021	2
	18/05/2021	2
	19/05/2021	2
	25/05/2021	2
	26/05/2021	2
	01/06/2021	2
	02/06/2021	2
No of Hours : 32 (ONLINE MODE)		
OFFLINE STARTS		
08/06/2021		
15/06/2021		
22/06/2021		
29/06/2021		
No of Hours : 8 (OFFLINE MODE)		
TOTAL HOURS : 40 HOURS (ONLINE+OFFLINE)		
	ADD-ON course commences on 20/4/2021	2
	21/4/2021	2
	27/4/2021	2

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S4	28/4/2021	2
	04/05/2021	2
	05/05/2021	2
	11/05/2021	2
	12/05/2021	2
	18/05/2021	2
	19/05/2021	2
	25/05/2021	2
	26/05/2021	2
	01/06/2021	2
	02/06/2021	2
	08/06/2021	2
	09/06/2021	2
	15/06/2021	2
	16/06/2021	2
	22/06/2021	2
	23/06/2021	2
	29/06/2021	2
	30/06/2021	2
No of Hours : 44 (ONLINE MODE)		
OFFLINE STARTS 06/06/2021		2
	13/06/2021	2
	20/06/2021	2
	27/06/2021	2
No of Hours : 8 (OFFLINE MODE)		
TOTAL HOURS : 52 (ONLINE MODE + OFFLINE MODE)		

Neethu

Neethu Rose Thomas

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LIST OF ADD-ON COURSES FOR THE ACADEMIC YEAR 2020-2021

No	Course Title	Staff in Charge & Cousre Handling Department	Target Students	Registration Fees
1	Building Planning and Drawing with Kerala Building Rules	CE department faculties + External Speaker (6 hours)	S6,S4 CE	RS 300/- REFUND AMOUNT: RS 200/-
2	OOPS concepts in JAVA and algorithm analysis	Mr. Bineesh M (CSE) Ms. Sobha Xavier (CSE)	S4, S6 CSE	RS 300/- REFUND AMOUNT: RS 200/-
3	Introduction to programming and problem solving in python	Mr. Anil Antony (CSE) Ms. Reshma K (CSE)	S6 ALL Branches	RS 300/- REFUND AMOUNT: RS 200/-
4	Introduction to Internet of Things	Fr David Nettikkadan(ECE)	S6 ECE/MR/ CSE /EEE	RS 300/- REFUND AMOUNT: RS 200/-
5	Image Processing with MATLAB	Ms. Bindhu K Rajan (ECE)	S6 EEE/ ECE/MR/ CSE	RS 300/- REFUND AMOUNT: RS 200/-
6	Introduction to VHDL	Mr. Kapil Das K S (EEE)	S4 CSE, ECE, EEE	RS 300/- REFUND AMOUNT: RS 200/-
7	Microwave Photonics Structural modelling	Dr. Chirappanath Bazil Albert (EEE)	S6 ECE /EEE	RS 300/- REFUND AMOUNT: RS 200/-
8	Non-Destructive Testing	External Agency	S6/S8 ME	Will be informed later
9	Computer Aided Design and Introduction to Solid Works	Mr. Christy V Vazhappilly (ME)	S4 All branches	RS 300/- REFUND AMOUNT: RS 200/-
10	Introduction to MATLAB	Dr. Rajalakshmi R (MR)	S4 EEE/ECE/ MR/CSE	RS 300/- REFUND AMOUNT: RS 200/-

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ADD-ON COURSES : S6 registration

We will be offering the following add-on courses for S6 students from 7th April 2021 onwards:

1. **PLANNING AND DRAFTING OF BUILDINGS**

2. **OOPS CONCEPTS IN JAVA AND ALGORITHM ANALYSIS**

3. **INTRODUCTION TO PROGRAMMING AND PROBLEM SOLVING IN PYTHON**

4. **INTRODUCTION TO INTERNET OF THINGS**

5. **IMAGE PROCESSING USING MATLAB**

6. **MICROWAVE PHOTONICS STRUCTURAL MODELLING**

7. **CERTIFIED COURSE ON NDT (NON DESTRUCTIVE TESTING) [EXTERNAL AGENCY]**

Interested students are encouraged to register for the courses before Wednesday 31st March 2021. The afternoon sessions of every Tuesday's and Wednesday's will be utilized for the add-on courses in online mode . During contact classes schedule will be informed later. One student can join only a single course at a time. Students can log on to the following link for registration and the course details at : http://tiny.cc/ADDONCOURSE

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LIST OF ADD-ON COURSES FOR THE ACADEMIC YEAR 2020-2021

Course Title	Staff in Charge & Cousre Handling Department	Allowed Department & Branch	Registration Fees
Planning and Drafting of Buildings	CE department faculties	S6 CE	RS 300/- REFUND : RS 200/-
OOPS concepts in JAVA and algorithm analysis	Mr. Bineesh M (CSE) Ms. Sobha Xavier (CSE)	S6 CSE	RS 300/- REFUND : RS 200/-
Introduction to programming and problem solving in python	Mr. Anil Antony (CSE) Ms. Reshma K (CSE)	S6 ALL Branches except CSE	RS 300/- REFUND : RS 200/-
Introduction to Internet of Things	Fr David Nettikkadan(ECE)	S6 ECE/MR/ CSE /EEE	RS 300/- REFUND : RS 200/- *Students have to buy hardware components
Image Processing with MATLAB	Ms. Bindhu K Rajan (ECE)	S6 EEE/ ECE/MR/ CSE	RS 300/- REFUND : RS 200/-
Microwave Photonics Structural modelling	Dr. Chirappanath Bazil Albert (EEE)	S6 ECE /EEE	RS 300/- REFUND : RS 200/-
Non-Destructive Testing	External Agency	S6 ME	Will be informed later

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PLANNING AND DRAFTING OF BUILDINGS

Eligible for: Semester IV and VI Civil Engineering Department students

ADD ON COURSE

The students who aspire to become successful professional Civil Engineers should have thorough understanding in planning and drafting of buildings. This course enhance your knowledge about planning and drawing sketches of all types of buildings from given data, preparing working drawings of all types of buildings from line sketches in CAD. This course offers demonstrated advanced knowledge and skills to make you capable to take a step in your career.

Course Objective

- To make the students familiar with Kerala Building Rules (KBR) and National Building Code (NBC) provisions.
- To enhance their skills to prepare and understand drawings.
- To impart knowledge of the drawing software Auto CAD
- To make the students capable enough to plan and draw different views of building according to Kerala Building Rules
- To make them competent in drafting the architectural and structural drawing of the plan of the buildings

Course Outcome

After successful completion of this course students will able to

CO1	Explain Building bye laws and Principles of Planning for residential and public buildings
CO2	Prepare a detailed drawing for residential and public buildings.
CO3	Interpret conventional sign, symbols and working drawings of various civil engineering structures
CO4	Prepare civil engineering drawings effectively and efficiently using CAD software
CO5	Prepare building sketches for the clients and submission drawings for approval

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A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF THRISSUR

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Skills Required

Background in civil engineering basics
Prior knowledge of Engineering Graphics

SYLLABUS

Building Planning: Functional Planning and lay out of buildings - Minimum dimension requirements of the buildings components according to building rules - Kerala building rules and regulations - Basics of Civil Drafting - Use of drawing instruments – Numerical and graphical scale - conventional signs and symbols - Building drawing aspects - Plan, Elevation and Section of buildings –Different type of floor plans - Design and drafting of different building parts - Preparation of approval drawing - Service Plan preparation- Civil Draftsman Software : Auto CAD – Building and Structural Drawing

REFERENCES:
1. National Building Code (NBC) of India
2. Kerala Building Rules (KBR)
3. Balagopal T.S. Prabhu, Building drawing and detailing, Spades Publishers
4. Elementary Structural Design and Drawing Vol 1 , Krishnamurthy D
5. R.C.C. Designs, B.C. Punmia

COURSE PLAN (35)

Section	Topic	No. of hours
Section 1 Building Planning (4 Hours)		
1a	Functional Planning of buildings- Positioning of various components of buildings; Orientation of buildings.	2
1b	Functional design of building - Using inter connectivity diagrams; Economic considerations and Minimum dimension requirements of the building components according to building rules.	2
Section 2 Kerala Building Rules (2 Hours)		
2a	Kerala Building Rules (KBR) and National Building Code (NBC)- Building bye laws and codal provisions for building planning and drawings	2
Section 3 Basics of Civil Drafting (4 Hours)		
3a	Introduction of drawing instruments and materials, Basics and importance of different types of lines- visible outlines, hidden lines, centre line and hatching line etc	2
3b	Numerical and Graphical scales, conventional signs and symbols	
Section 4 Building drawing aspects (8 Hours)		

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4a	Plan, Section and elevation of buildings	2
4b	Different type of floor plans (ground floor, upper floor, Basement etc.)	2
4c	Detailing of the special elements of building (Arches, lintels, doors, windows, roofs etc.)	2
4d	Drawing of staircases – minimum requirements (rise, thread, number of steps in each flight, landing slab dimension details) Different views of staircase - Plan, section, elevation.	2

Section 5 Approval Drawings (9 Hours)

5a	Building drawing as per government rules and regulations – elements in the government approved drawing	2
5b	Draw plan, section, and elevation of residential buildings (single & double) with help of sketches, and line diagrams as per the government approved drawing.	4
5c	Draw perspective view of building including coloring practice & shading	1
5d	Preparation the service plan showing service lines and networks: Road layouts, sewer and storm water drainage system, water supply lines. Electrical and telecom networks. Overview of materials used for site layouts and site networks.	2

Section 6 Civil Draftsman Software(8 Hours)

6a	Training in AutoCAD Drawing - Drafting of building plan, Elevation, Section Views, applying dimensions to various views by using dimension style, Building Planning and detailing, Drawing of two storied residential buildings.	8

Section 7 Structural Drawing (2 Hours)

7a	Structural detailing of building – Slab, column, beam, foundation, etc.	2

COURSE OUTCOMES VS PO MAPPING:

Sl.No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	2	2			1	1		1				
C02	2	2				1						
C03	2	2										
C04	2	2	2	1	2			1				
C05	2	2	2	1				1				
Avg	2	2	2	1	1.5	1		1				

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Object-Oriented Programming using the Java programming language

Eligible for: S4, S6 Students of CSE Department

ADD ON COURSE

Course Objective

This course introduces object-oriented programming using the Java programming language. Students will learn how to program in Java and use some of its most important APIs. Special importance will be assigned to the object-oriented nature of Java and its use of polymorphism. Hands-on labs and exercises will enable students toward becoming highly skilled Java Application developers.

Course Outcome

Upon course completion, students will have demonstrated the ability to do the following:

1. Understand object-oriented programming principles
2. Write, compile and execute java programs
3. Understand the java architecture and use the java APIs
4. Understand and use of inheritance and polymorphism as implemented in java
5. Understand and use the exception handling mechanism of java, perform standard input-output operations
6. Understand and use GUI components

Skills Required

Prior knowledge of Java language is helpful.

SYLLABUS

Introduction   (2 Hours)

Introduction to object Oriented Programming, Introduction to Java, Java Configuration.

Classes, Objects and Methods: (3 Hours)

Class, Object, Object reference, Constructor, Method Overloading, Recursion, Passing and Returning object from Method, this and static keyword, finalize() method, Access control, modifiers.

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Inheritance and Interfaces: (3 Hours)

Inheritance, constructor in inheritance, Multilevel Inheritance – method overriding Handle multilevel constructors – super keyword, Stop Inheritance – Final keywords, Abstract class.

Interface, reference, Interface inheritance, Comparison between Abstract Class and interface.

Package: (2 Hours)

Use of Package, CLASSPATH, Import statement, Static import, Access control

Exception Handling: (2 Hours)

Exception and Error, Use of try, catch, throw, throws and finally, Built in Exception, Custom exception, Throwable Class.

IO Programming: (2 Hours)

Introduction to Stream, Byte Stream, Character stream, Readers and Writers, File Class, File InputStream, File Output Stream, InputStreamReader, OutputStream-Writer, FileReader, FileWriter, Buffered Reader

Collection Classes : (2 Hours)

List, AbstractList, ArrayList, LinkedList, Enumeration, Vector, Properties, Introduction to Java.util package

Datastructures : (6 Hours)

Overview. Abstract Data Types. Arrays and Linked Lists. Stacks and Queues. Introduction to Trees. Graphs.

Multithreaded Programming: (2 Hours)

Use of Multithread programming, Thread class and Runnable interface, Thread priority, Thread synchronization, Thread communication, Deadlock

Java Data Base Connectivity: (3 Hours)

Java Data Base Connectivity; Database Management; Mechanism for connecting to a back end database; Loading the ODBC driver.

Swing: (3 Hours)

Concepts of Swing; Java Foundation Class (JFC); Swing Packages and Classes; Working with Swing- An Example; Swing Components

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Reference:

How to Program. 9th/11th ed. by Deitel & Deitel, (**required**)

Thinking in Java. 4th ed. by Bruce Eckel (**useful as further reading**)

COURSE PLAN (30 HOURS MANDATORY)

Sl. No.	Topics to be covered	Planned Date & Hour
1	Introduction to object Oriented Programming, Introduction to Java.	2
2	Java Configuration.	2
3	Class, Object, Object reference, Constructor, Method Overloading.	1
4	Recursion, Passing and Returning object from Method.	2
5	'This' and static keyword, finalize() method, Access control, modifiers.	2
6	Inheritance, constructor in inheritance, Multilevel Inheritance –	1
7	method overriding Handle multilevel constructors – super keyword, Stop Inheritance – Final keywords, Abstract class.	1
8	Interface, reference, Interface inheritance, Comparison between Abstract Class and interface.	1
9	Use of Package, CLASSPATH.	1
10	Import statement, Static import, Access control	1

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11	Exception and Error, Use of try, catch, throw, throws and finally.	1
12	Built in Exception, Custom exception, Throwable Class.	1
13	Introduction to Stream, Byte Stream, Character stream, Readers and Writers, File Class, File InputStream.	1
14	File Output Stream, InputStreamReader, OutputStreamWriter, FileReader, FileWriter, Buffered Reader	1
15	List, AbstractList, ArrayList.	1
16	LinkedList, Enumeration, Vector, Properties, Introduction to Java.util package	1
17	Overview. Abstract Data Types. Arrays and Linked Lists.	1
18	Stacks and Queues. Introduction to Trees. Graphs.	1
19	Overview. Abstract Data Types. Arrays and Linked Lists..	1
20	Stacks and Queues.	1
21	Introduction to Trees. Graphs	1
22	Use of Multithread programming, Thread class and Runnable interface.	1
23	Thread priority, Thread synchronization.	1
24	Thread communication, Deadlock.	1
25	Java Data Base Connectivity;	1
26	Database Management;	

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27	Mechanism for connecting to a back end database; Loading the ODBC driver.	1
28	Concepts of Swing; Java Foundation Class (JFC);	1
29	Swing Packages and Classes;	1
30	Working with Swing- An Example; Swing Components	1

COURSE OUTCOMES VS PO MAPPING:

Sl. No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	3	3	3	2	1	1	2	3	3	3	3	3
C02	3	3	3	3	3	3	3	3	3	3	3	3
C03	3	3	3	2	1	1	2	3	3	3	3	3
C04	3	3	3	2	1	1	2	3	3	3	3	3
C05	3	2	1	1	2	2	2	3	3	3	3	3
C06	3	2	1	1	2	1	1	3	3	3	3	3
Avg	3	2.666667	2.333333	1.833333	1.666667	1.5	2	3	3	3	3	3

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INTRODUCTION TO PROGRAMMING AND PROBLEM SOLVING IN PYTHON

Eligible for: S6 CE, ECE, EEE, ME, MR

ADD ON COURSE

This course is designed as an introduction to programming and programming language Python for the students who have no or very little programming knowledge and experience. It could be used as a preparation for more advanced programming courses as well as a self-contained course for those who want to use Python for their studies or professional work. The course is structured to benefit most to students who have information science and informatics orientation, however, it will be equally benefit those who are interested to use Python for text and data processing.

Course Objective

To understand the nature of programming as human activity for solving different problems in real life solution.

1. To learn and experience main components of programming process
2. To understand main control structures of procedural programming languages
3. To learn and being able to use major programming patterns
4. To experience and use modern object-oriented programming paradigm
5. To understand the principles of data storage and manipulation
6. To get practical knowledge of a popular programming language Python

Course Outcome

1. You will be able to run and explore program examples.
2. You will be able to solve programming exercises.
3. You will be able to write programs in Python

Skills Required

Since this course is targeted to the students who have no or very little programming knowledge and experience

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SYLLABUS

Course Topic Overview

- Variables, assignments (2 hours)
- Simple input (1 hour)
- Main program (1 hour)
- If-statement (2 hours)
- Logical operators (1 hour)
- Loops (3 hours)
- Output formatting (1 hour)
- Functions (2 hours)
- Parameters, return values (1 hour)
- Debugger (1 hour)
- Lists (2 hours)
- Strings (3 hours)
- Dictionary (2 hours)
- Values and references (1 hour)
- Basics of program design (1 hour)
- Programming style (1 hour)
- Exceptions (1 hour)
- File handling (1 hour)
- Classes and objects (2 hours)

COURSE PLAN (30 HOURS MANDATORY)

Sl No	Topics to be covered	Planned Date & Hour
1	·Variables, assignments	1
2	·Variables, assignments	1
3	Simple input	1
4	Main program	1
5	If-statement	1
6	If-statement	1
7	·Logical operators	1
8	·Loops	1
9	·Loops-Examples	1

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10	·Loops-Examples	1
11	·Output formatting	1
12	Functions	1
13	Functions-Examples	1
14	Functions-Examples	1
15	Parameters, return values	1
16	Debugger	1
17	·Lists	1
18	·Lists	1
19	·Strings	1
20	·Strings	1
21	·Strings	1
22	·Dictionary	1
23	·Dictionary	1
24	·Values and references	1
25	·Basics of program design	1
26	·Programming style	1
27	·Exceptions	1
28	·File handling	1
29	Classes and objects	1
30	Classes and objects	1

COURSE OUTCOMES VS PO MAPPING:

Sl.No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	3	3	3	2	1	1	2	3	3	3	3	3
C02	3	3	3	3	3	3	3	3	3	3	3	3
C03	3	3	3	2	1	1	2	3	3	3	3	3
C04	3	3	3	2	1	1	2	3	3	3	3	3
C05	3	2	1	1	2	2	2	3	3	3	3	3
Avg	3	2	1	1	2	1	1	3	3	3	3	3
	3	2.666667	2.333333	1.833333	1.666667	1.5	2	3	3	3	3	3

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INTRODUCTION TO INTERNET OF THINGS

Eligible for: S6 ECE, EEE, CSE, MR

ADD ON COURSE

This course will provide you with an overview of embedded system design using development boards like Arduino. You will learn to interface various sensors and actuators and to send and receive data using various IoT platforms which enables remote monitoring and control. Thus, the course will enable you to design and develop an IoT based project.

This course is based on the project-based learning approach. First five modules will be based on simulation or demonstration. At the end of course, you will have to form as teams and build a project based on your design project or your plan on main project. You will have to develop a project as part of the course and the components required has to be bought by the students itself. The project development will be done during the contact classes under the supervision and guidance of course instructor.

Course Objective

1. To introduce the concept and the basics of IoT Technologies and Architecture.
2. To provide knowledge on hardware and technologies involved in building an IoT bases system
3. To design basic IoT applications using Arduino
4. To make awareness of various IoT applications and challenges involved.

Course Outcome

CO 1	Understand the basics of an embedded system
CO 2	Identify IoT technology and its applications
CO 3	Analyze various hardware components in an IoT based system
CO 4	Develop prototype models for various IoT applications using Arduino

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CO 5	Understand Challenges and opportunities of Internet of Things.

Skills Required

Prior knowledge of "C" language is helpful.

SYLLABUS

Module 1. Arduino Simulation Environment (6 Hour)

Arduino Uno Architecture - Setup the IDE, Writing Arduino Software - Arduino Libraries - Basics of Embedded C programming for Arduino - Interfacing LED, push button and buzzer with Arduino - Interfacing Arduino with LCD

Module 2. Sensor & Actuators with Arduino (6 Hour)

Overview of Sensors working - Analog and Digital Sensors - Interfacing of Temperature, Humidity, Motion, Light and Gas Sensor with Arduino - Interfacing of Actuators with Arduino - Interfacing of Relay Switch.

Module 3. Introduction to IOT (6 Hour)

Understanding IoT fundamentals - IOT Architecture and protocols - Various Platforms for IoT - Real time Examples of IoT - Overview of IoT components and IoT Communication Technologies - Challenges in IOT

Module 4. Basic Networking with ESP8266 WiFi module (6 Hour)

Basics of Wireless Networking - Introduction to ESP8266 Wi-Fi Module - Various Wi-Fi library - Web server- introduction, installation, configuration - Posting sensor(s) data to web server

Module 5. Cloud Platforms for IOT (6 Hour)

Virtualization concepts and Cloud Architecture - Study of IOT Cloud platforms - ThingSpeak API and MQTT - Interfacing ESP8266 with Web services

Module 6. Project (10 Hour)

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Reference:

Boxall, John. Arduino workshop: A Hands-On introduction with 65 projects. No Starch Press, 2013.

Schwartz, Marco. Internet of things with arduino cookbook. Packt Publishing Ltd, 2016.

Javed, Adeel. "Building Arduino Projects for the Internet of Things." Experiments with Real-World Applications. United States of America: Apress Media, LLC (2016): 15-34.

Norris, Donald. The internet of things: Do-it-yourself at home projects for arduino, raspberry pi, and beaglebone black. McGraw-Hill Education, 2015.

Singh, Rajesh, Anita Gehlot, Lovi Raj Gupta, Bhupendra Singh, and Mahendra Swain. Internet of Things with Raspberry Pi and Arduino. CRC Press, 2019.

COURSE PLAN

No.	Topics to be covered	Number of Hours Needed
1	**Arduino Simulation Environment**	
1.1	Arduino Uno Architecture	1
1.2	Setup the IDE, Writing Arduino Software	1
1.3	Arduino Libraries	1
1.4	Basics of Embedded C programming for Arduino	1
1.5	Interfacing LED, push button and buzzer with Arduino	1
1.6	Interfacing Arduino with LCD	1
2	**Sensor & Actuators with Arduino**	
2.1	Overview of Sensors working	1
2.2	Analog and Digital Sensors	1
2.3	Interfacing of Analog Sensors	1
2.4	Interfacing of Digital Sensors	1
2.5	Interfacing of Actuators with Arduino.	
2.6	Interfacing of Relay Switch	

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3	**Introduction to IOT**	
3.1	Understanding IoT fundamentals	1
3.2	IOT Architecture and protocols	1
3.3	Various Platforms for IoT	1
3.4	Real time Examples of IoT	1
3.5	Overview of IoT components and IoT Communication Technologies	1
3.6	Challenges in IOT	1
4	**Basic Networking with ESP8266 WiFi module**	
4.1	Basics of Wireless Networking	1
4.2	Introduction to ESP8266 Wi-Fi Module	1
4.3	Various Wi-Fi library	1
4.4	Web server- introduction, installation, configuration	2
4.5	Posting sensor(s) data to web server	1
5	**Cloud Platforms for IOT**	
5.1	Virtualization concepts and Cloud Architecture	1
5.2	Study of IOT Cloud platforms	1
5.3	ThingSpeak API and MQTT	2
5.4	Interfacing ESP8266 with Web services	2
6	**Project**	**10**

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Image Processing with MATLAB

Eligible for: S6 (ECE, EEE, MC,CS)

ADD ON COURSE

MATLAB is a programming language developed by MathWorks. It started out as a matrix programming language where linear algebra programming was simple. It can be run both under interactive sessions and as a batch job. This tutorial gives you aggressively a gentle introduction of MATLAB programming language. It is designed to give students fluency in MATLAB programming language. Problem-based MATLAB examples have been given in simple and easy way to make your learning fast and effective

Course Objective

To familiarise the various simulation tools

Course Outcome

1. You will be able to enhance image characteristics by adjusting the image intensity and isolating the region of interest.
2. You will be able understand how block processing works and investigate the implementation of both spatial domain and frequency domain filters
3. You will be able to reduce the effects of unwanted distortions, such as noise, blurring, and background illumination.
4. You will be able to extract image features and measurements using different segmentation and edge detection methodologies.
5. You will be able to learn many of MATLAB commands and how to use them in programming to solve many problems in different mathematical subjects.

Skills Required

Prior knowledge of "C" language is helpful, but not necessary

SYLLABUS

Introduction to MATLAB   (10 Hours)

MATLAB Envirionment- MATLAB Commands- MATLAB Data types- MATLAB operator -Control statements- MATLAB Loops- Array & functions- Program Termination-

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MATLAB Graphics (2D & 3 D plot)- Operation on matrices- MATLAB polynomial/Integration- Transforms

Image Processing Toolbox

Begin Image Processing Toolbox- Import, Export, and Conversion- Finding image characteristics -Image operators-Display and Exploration- Geometric Transformation and Image Registration- Reducing noise-Deblurring images-Image Filtering and Enhancement- Enhancing images using arithmetic operations- Correcting image alignment – Rotating images-Cropping and resizing images- Image convolution and correlation- Region of interest processing Image Segmentation and Analysis-Edge detection- Deep Learning for Image Processing- 3-D Volumetric Image Processing- Code Generation- GPU Computing- Detect and Measure Circular Objects in an Image

Reference:

1. Y Kirani Singh, B B Chaudhari *MATLAB PROGRAMMING*, PHI Learning

COURSE PLAN (30 HOURS MANDATORY)

Sl. No.	Topics to be covered	Planned Date & Hour
1	MATLAB Envirionment- MATLAB Commands-	1
2	MATLAB Data types-	2
3	MATLAB operator	3
4	Control statements- MATLAB Loops	4
5	Array & functions-	5
6	Program Termination	6

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7	MATLAB Graphics (2D & 3 D plot)	7
8	Operation on matrices	8
9	MATLAB polynomial/Integration	9
10	Transforms	10
11	Begin Image Processing Toolbox	11
12	Import, Export, and Conversion	12
13	Finding image characteristics -Image operators	13
14	Display and Exploration-	14
15	Geometric Transformation	15
16	Image Registration	16
17	Reducing noise	17
18	Deblurring images	18
19	Image Filtering and Enhancement	19
20	Enhancing images using arithmetic operations	20
21	Correcting image alignment	21
22	Rotating images	22
23	Cropping and resizing images	23
24	Image convolution and correlation	24
25	Region of interest processing	25
26	Image Segmentation and Analysis	26

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27	Edge detection	27
28	Deep Learning for Image Processing	28
29	3-D Volumetric Image Processing	29
30	Code Generation	30
31	- GPU Computing	31
32	Detect and Measure Circular Objects in an Image	32

COURSE OUTCOMES VS PO MAPPING:

Sl.No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	2	3	3	3	3				2			3
C02	2	3	3	3	3				2			3
C03	2	3	3	3	3				2			3
C04	2	3	3	3	3				2			3
C05	2	3	3	3	3				2			3
Avg	2	3	3	3	3				2			3

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Introduction to VHDL

Eligible for: CSE,ECE,EEE (S4 STUDENTS)

ADD ON COURSE

This course will provide you with an overview of the VHDL language and its use in logic design. By this course, you will understand the basic Parts of VHDL structure and its usage and basic VHDL Constructs Used in the Simulation. You will also be able to build simple digital Logic Structures for specific purpose and connect entire models together to create Hierarchical Designs.

Course Objective

To familiarise the integration of industry standard hardware description language VHDL into the digital design process

Course Outcome

1. You will be able to write VHDL code for simple digital hardware designs
2. You will be able to design and implement various combinational and sequential digital circuits using different styles of modelling of VHDL.
3. You will be able to simulate and validate a digital design/logic using VHDL with the help of ModelSim/ Xilinx Software

Skills Required

1. **Background in digital logic design**
2. Prior knowledge of "C" language is helpful, but not required

SYLLABUS

Introduction   (2 Hours)

About VHDL- VHDL Versions-Design Flow- EDA Tools-Translation of VHDL Code into a Circuit-Circuit Simulation- VHDL Syntax-Number and Character Representations in VHDL

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Code Structure   (6 Hours)

Fundamental VHDL Units- VHDL Libraries and Packages-Library/Package Declarations- ENTITY- ARCHITECTURE- GENERIC -Coding Guidelines

Data Types   (6 Hours)

Introduction- VHDL Objects-Data-Type Libraries and Packages -Type Classifications-Standard Data Types-Standard-Logic Data Types-Unsigned and Signed Data Types-Fixed- and Floating-Point Types-Predefined Data Types Summary- User-Defined Scalar Types-User-Defined Array Types- Subtypes - Type Conversion-Legal versus Illegal Assignments

Concurrent Code   (8 Hours)

Introduction -Using Operators-The WHEN Statement-The SELECT Statement- The GENERATE Statement-Implementing Sequential Circuits with Concurrent Code-Implementing Arithmetic Circuits with Operators

Implementation of Combinational Circuits using VHDL

Sequential Code   (8 Hours)

Introduction- PROCESS -The IF Statement -The WAIT Statement- The LOOP Statement - The CASE Statement -Implementing Combinational Circuits with Sequential Code-SIGNAL and VARIABLE

Implementation of sequential Circuits using VHDL

Synchronous Sequential Design (10 Hours)

Synchronous Sequential Systems , Models of Synchronous Sequential Systems, Algorithmic State Machines ,Synthesis from ASM chart , State Machines in VHDL

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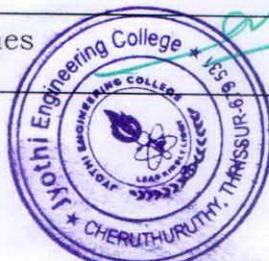
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Reference: Volnei A. Pedroni *"Circuit Design and Simulation with VHDL"*, second edition, The MIT press

COURSE PLAN (30 HOURS MANDATORY)

Sl. No.	Topics to be covered	Planned Date & Hour
1	About VHDL- VHDL Versions-Design Flow- EDA Tools-Translation of VHDL Code into a Circuit	1
2	-Circuit Simulation- VHDL Syntax-Number and Character Representations in VHDL	2
3	Fundamental VHDL Units- VHDL Libraries and Packages-Library/Package Declarations	3
4	Entity	4
5	Architecture and its types with examples	5
6	Architecture and its typeswith examples	6
7	Architecture and its typeswith examples	7
8	GENERIC -Coding Guidelines	8
9	VHDL Objects-Data-Type Libraries and Packages	9
10	Type Classifications-Standard Data Types	10
11	Standard-Logic Data Types-Unsigned and Signed Data Types-Fixed- and Floating-Point Types-Predefined Data Types Summary	11
12	User-Defined Scalar Types-User-Defined Array Types	12
13	Subtypes, Type Conversion	13

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14	Legal versus Illegal Assignments with examples	14
15	Concurrent code	15
16	Using Operators-The WHEN Statement-The SELECT Statement with examples	16
17	Using Operators-The WHEN Statement-The SELECT Statementwith examples	17
18	The GENERATE Statement with examples	18
19	The GENERATE Statement with examples	19
20	VHDL Code for Combinational Circuits	20
21	VHDL Code for Combinational Circuits	21
22	VHDL Code for Combinational Circuits	22
23	**Sequential Code:**PROCESS statement	23
24	IF Statement -The WAIT Statement with examples	24
25	CASE Statement with examples	25
26	The LOOP Statement with examples	26
27	Implementation of sequential Circuits using VHDL	27
28	Implementation of sequential Circuits using VHDL	28
29	Implementation of sequential Circuits using VHDL	28
30	Implementing Combinational Circuits with Sequential Code	30
31	**Synchronous Sequential Systems** , Models of Synchronous Sequential Systems	31
32	Algorithmic State Machines	32

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33	Algorithmic State Machines with examples	33
34	Algorithmic State Machines with examples	34
35	Synthesis from ASM chart	35
36	Synthesis from ASM chart with examples	36
37	State Machines in VHDL	37
38	State Machines in VHDL with examples	38
39	State Machines in VHDL with examples	39
40	State Machines in VHDL with examples	40

COURSE OUTCOMES VS PO MAPPING:

Sl.No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	2		1									
C02	2	1	2									
C03	2				2							1
C04												
C05												
Avg	2	1	1.5		2							1

Preferred Time Slot :

KAPILDAS K.J.

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Microwave Photonics Structure Modelling

Eligibility: Semester S6 EEE, ECE

ADD-ON COURSE

The course will bring an insight to the students on microwave photonics and its use in today's industry. Over the completion of this course the student will be able to understand the basic of microwave photonics, the components used and will be able to familiarize with the photonics design software VPI Photonics. With the successful completion of this course, you will be able to design analog photonic structures and understand their working.

Course Objective

To familiarize with microwave photonics, components used and the design.

Course Outcome

1. Explain the principles of microwave photonics.
2. Be able to understand microwave photonics subsystem designs.
3. Recognise the broad applicability of microwave photonics in many fields.
4. Able to write MATLAB Codes for the simulation analysis.
5. Develop new novel microwave photonics architectures.
6. Use VPI software for the testing and simulation.

Knowledge Required

1. Basic knowledge on Signal Processing.
2. Basic MATLAB coding skills.

SYLLABUS (30 Hours)

Introduction to optical communications (3 Hours)

Motivation for fiber optic communication- Introduction to phase modulation- Overview of Optical Communication System-Working Principle-Parts of Fibre- Types of Optical Fiber- Optical Fiber Communication-Functional Advantage- Physical Advantages-Disadvantages-Application of Fiber Optical.

Introduction to Microwave photonics components. (6 Hours)

Optical sources-Optical Modulators-Signal Sources-Optical Fibers-Detectors-Analyzer Units-Types of optical Sources- LED-Types of LED-Working Principle of LED-LED Structure-LED Configuration- Light Source Materials-Advantages and Disadvantages of LED- Injection Laser Diodes -Fabry – Perot Resonator- Distributed Feedback (DFB)

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Laser- Optical Characteristics of LED and Laser- Optical Detectors -Balanced Detector- Phase Modulator-MZM-DDMZM-DPMZM-DPMZM with 90 degree polarization rotator.

Fibre Optic Link (4 Hours)

Introduction-Working Principle-Practical Applications- Advancements and Advantages- Fiber Optic Link Components- Optical Transmitter - Optical Fiber/Cable-Connectors -Optical Receiver

Noises (4 Hours)

Sources of Noise- shot noise, thermal noise, NEP, SNR, Heterodyne detectors, SNR in heterodyne detection- Noise in Lasers- Relative Intensity Noise, Phase noise, Effect of noise on different modulation schemes

Nonlinear effects (2 Hours)

Cross Phase Modulation, Four Wave Mixing, Stimulated Raman and Brillouin Scattering,

Recent Advancements and Scope (1 Hour)

Recent Advancements and Scope-Applications

Introduction to modelling software and MATLAB (10 Hours)

Understanding Analysis Process with example– Developing Mathematical Model – Analysing the Mathematical model in MATLAB-Developing the model in Photonics Simulation Software- Comparing the Software model with the MATLAB model.

Reference:

[1]. Jäger, Dieter & Stöhr, Andreas. (2005). Microwave Photonics - From   Concepts to Applications.

[2] Fiber Optic Communication Systems by G P Agrawal

[3] Introduction to Fiber Optics by Ghatak and Thyagarajan

[4] Optical Fiber Communications –Principles and Practice by Senior

COURSE PLAN (30 HOURS MANDATORY)

Sl. No.	Topics to be covered	Planned Date & Hour
1	Motivation for fiber optic communication- Introduction to phase modulation-Overview of Optical Communication System.	1
2	Working Principle-Parts of Fibre- Types of Optical Fiber- Optical Fiber Communication.	2
3	Functional Advantages-Physical Advantages-Disadvantages-Application of Fiber Optical.	

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4	Optical sources-Optical Modulators-Signal Sources-Optical Fibers-Detectors-Analyzer Units	4
5	Types of optical Sources- LED-Types of LED-Working Principle of LED-LED Structure-LED Configuration.	5
6	Injection Laser Diodes- Fabry – Perot Resonator- Distributed Feedback (DFB) Laser- Optical Characteristics of LED and Laser	6
7	Optical Detectors -Balanced Detector- Phase Modulator	7
8	MZM-DDMZM-DPMZM-DPMZM with 90 degree polarization rotator.	8
9	MZM-DDMZM-DPMZM-DPMZM with 90 degree polarization rotator.	9
10	Introduction-Working Principle-Practical Applications.	10
11	Advancements and Advantages- Fiber Optic Link Components	11
12	Optical Transmitter - Optical Fiber/Cable	12
13	Connectors -Optical Receiver	13
14	Sources of Noise- shot noise, thermal noise, NEP, SNR, Heterodyne detectors, SNR in heterodyne detection	14
15	Sources of Noise- shot noise, thermal noise, NEP, SNR, Heterodyne detectors, SNR in heterodyne detection	15
16	Noise in Lasers- Relative Intensity Noise, Phase noise, Effect of noise on different modulation schemes	16
17	Noise in Lasers- Relative Intensity Noise, Phase noise, Effect of noise on different modulation schemes	17
18	Cross Phase Modulation, Four Wave Mixing,	18
19	Stimulated Raman and Brillouin Scattering	19
20	Recent Advancements and Scope-Applications	20

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21	Understanding Analysis Process with example	21
22	Understanding Analysis Process with example	22
23	Developing Mathematical Model	23
24	Developing Mathematical Model	24
25	Analysing the Mathematical model in MATLAB	25
26	Analysing the Mathematical model in MATLAB	26
27	Developing the model in Photonics Simulation Software-	27
28	Developing the model in Photonics Simulation Software-	28
29	Comparing the Software model with the MATLAB model.	28
30	Comparing the Software model with the MATLAB model.	30

COURSE OUTCOMES VS PO MAPPING:

Sl.No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	2		1									
C02	2	1	2									
C03	2				2							1
C04												
C05												
Avg	2	1	1.5		2							1

Dr. Chirappanath Bazil Albert

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Computer Aided Design & Introduction to SOLIDWORKS

ADD ON COURSE

This course will provide you with working knowledge on Computer Aided Design methods and procedures. You will also understand the basics of 3D modelling, design and assembly of various multi component systems, and the preparation of drawing sheet preparation and documentation.

Eligibility

S4 All Branches

Course Objective

- To provide working knowledge on Computer Aided Design methods and procedures
- To impart training on solid modelling software (Solidworks)

Course Outcome

- The students will be able to gain working knowledge in Computer Aided Design methods and procedures
- The students will be able to gain training on solid modelling software (Solidworks)

SYLLABUS

Introduction   (4 hours)

Introduction to computer graphics - viewing transformations, curves and surfaces generation, curve fitting and curve fairing techniques - 2D, wire frame.

3D Modelling   (8 hours)

Creation of higher end 3D solid models, Familiarity with Boolean operations - sweep, revolve, loft, extrude, filleting, chamfer, splines etc. - windowing, view point, clipping, scaling and rotation transformations using commercial solid modelling packages, 3D shading

Design and Assembly   (10 hours)

Creation of assembled views of different components, assembling of various parts and tolerance analysis

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Drawing sheet preparation   (8 hours)

Drawing & Sheet Setup Instructions documentation section, Preparation of drawing sheet templates, Preparation of drawing sheet and bill of materials etc.

Reference:

- F. R. David, Procedural Elements for Computer Graphics, McGraw Hill
- Ibrahim Zeid, CAD/ CAM Theory and Practice, McGraw Hill, 2007

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Introduction to MATLAB

Eligible for: S4 & MR/ECE/EEE

ADD ON COURSE

The course will give the fundamental knowledge and practical abilities in MATLAB required to effectively utilize this tool in technical numerical computations and visualisation in other courses. MATLAB is a very popular language for technical computing used by students, engineers, and scientists in universities, research institutes, and industries all over the world. The software is popular because it is powerful and easy to use, and it has a great number of tools, built in functions and simulation windows which can be used for many applications in many fields.

Course Objective

1. To impart the knowledge to the students with MATLAB software.
2. To provide a working introduction to the MATLAB technical computing environment.
3. To introduce students the use of a high-level programming language, MATLAB.

Course Outcome

On successful completion of the course, the students should be able to

1. Understand the fundamental computer programming concepts such as variables, control structures, functions, data types and how to handle them in MATLAB.
2. Understand the main features of the MATLAB program development environment to enable their usage in the higher learning.
3. They shall learn a great number of MATLAB commands and how to use them in programming and in many applications in Mathematics.
4. They shall be able to write a MATLAB script and create a useful functions to be used later in another mathematical subject.

Skills Required

- C Programming, Basics of Engineering Mathematics

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SYLLABUS

STARTING WITH MATLAB
(7 Hours)

Starting MATLAB, MATLAB windows - working in the command window -arithmetic operations with scalars - display formats - Elementary math built-in functions- Defining scalar variables - Useful commands for managing variables - Script files - Examples of MATLAB applications.

CREATING ARRAYS
(4 Hours)

Creating a one-dimensional array (vector) -Creating a two-dimensional array (matrix) - Notes about variables in MATLAB - The transpose operator - Array addressing - Using a colon : in addressing arrays - Adding elements to existing variables - Deleting elements - Built-in functions for handling arrays -Strings and strings as variables-Problems

MATHEMATICAL OPERATIONS WITH ARRAYS
(3 Hours)

Addition and Subtraction -Array multiplication -Array division -Element-by-element operations-Using arrays in MATLAB built-in math functions -Built-in functions for analyzing arrays-Generation of random numbers -Examples of MATLAB applications - Problems

TWO-DIMENSIONAL PLOTS
(4 Hours)

The plot command -The fplot command -Plotting multiple graphs in the same plot - Formatting a plot -Plots with error bars -Plots with special graphics -Histograms -Polar plots -Plotting multiple plots on the same page -Multiple figure windows -Examples of MATLAB applications –Problems.

USER-DEFINED FUNCTIONS AND FUNCTION FILES
(2 Hours)

Creating a function file -Structure of a function file- Saving a function file- Using a user-defined function- Examples of MATLAB applications- Problems.

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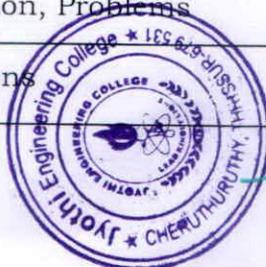Approved by AICTE & affiliated to APJ Abdul Kalam Technological University

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PROGRAMMING IN MATLAB   (3 Hours)

Relational and logical operators - Conditional statements - The switch-case statement - Loops -Nested loops and nested conditional statements -The break and continue commands - Examples of MATLAB applications-Problems.

POLYNOMIALS, CURVE FITTING, AND INTERPOLATION   (2 Hours)

Polynomials- Curve fitting - Interpolation – Problems.

SYMBOLIC MATH   (4 Hours)

Solving algebraic equations – Differentiation – Integration - Solving an ordinary differential equation-Problems.

Reference:

[1] Gilat, Amos, 2008, "MATLAB An Introduction With Applications", 3rd Ed., JOHN WILEY & SONS, INC. , USA .

[2] Hunt, Brian R. & others, 2001, "A Guide to MATLAB for Beginners and Experienced Users", Cambridge University Press, USA.

[3] McMahon, David, 2007,"MATLAB Demystified", The McGraw-Hill Companies, USA.

[4] Davis, Timothy A. & Sigmon, Kermit, 2007, "MATLAB Primer", 7th Ed., Chapman & Hall/CRC, USA.

COURSE PLAN (30 HOURS MANDATORY)

Sl. No.	Topics to be covered	Hour
1	Starting MATLAB, MATLAB Windows.	1
2	Working in the Command Window.	2
3	Arithmetic Operations With Scalars, Display Formats.	3
4	Elementary Math Built-In Functions, Problems.	5
5	Defining Scalar Variables, Useful Commands for Managing Variables.	6

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6	Script Files, Examples of MATLAB Applications.	7
7	Creating a One-Dimensional Array (Vector), Creating a Two-Dimensional Array (Matrix), Notes About Variables in MATLAB.	8
8	The Transpose Operator, Array Addressing, Using A Colon : In Addressing Arrays.	9
9	Adding Elements to Existing Variables, Deleting Elements, Built-In Functions For Handling Arrays.	10
10	Strings and Strings as Variables, Problems	11
11	Addition and Subtraction, Array Multiplication, Array Division.	12
12	Element-by-Element Operations, Using Arrays in MATLAB Built-in Math Functions, Built-In Functions for Analyzing Arrays, Generation of Random Numbers.	13
13	Examples of MATLAB Applications & Problems.	14
14	The pplot Command, The fplot Command, Plotting Multiple Graphs In The Same Plot.	15
15	Formatting a Plot.	16
16	Plots With Error Bars, Plots With Special Graphics, Histograms, Polar Plots, Plotting Multiple Plots on The Same Page, Multiple Figure Windows.	17
17	Examples of MATLAB Applications & Problems.	18
18	Creating a Function File, Structure of a Function File, Saving a Function File, Using a User-Defined Function.	19
19	Examples of MATLAB Applications & Problems.	20
20	Relational and Logical Operators, Conditional Statements, The Switch-Case Statement.	21
21	Loops : Nested Loops and Nested Conditional Statements, The Break And Continue Commands.	22
22	Examples of MATLAB Applications, Problems.	23
23	Polynomials	24
24	Curve Fitting , Interpolation, Problems	25
25	Solving Algebraic Equations	26

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26	Integration	27
27	Differentiation	28
28	Solving an Ordinary Differential Equation	29
29	Exam	30

COURSE OUTCOMES VS PO MAPPING:

Sl.No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C01	3	2	1		2				2			1
C02	3	3	3	2	2		1		2			1
C03	2	3	3	3	2				2			1
C04	2	3	3	3	2				2			1
Avg	2.5	2.75	2.5	2	2		1		2			1

M. Rajni

Dr. M. RAJALAKSHMI

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GOOGLE CLASS ROOM CODE: S6 ADD-ON COURSES

Sl. No	Course Name	Google Class Room Code
1	Planning and Drafting of Buildings	kic56fj
2	Introduction to programming and problem solving in python	p2nooss
3	OOPS concepts in JAVA and algorithm analysis	k6wunvb
4	Image Processing with MATLAB	3ju3b6h
5	Introduction to Internet of Things	dpolzma

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STUDENT NAME LIST

ADD-ON COURSE: Planning and Drafting of Buildings

Sl No	NAME	Register Number	Email	Phone Number	Branch
1	Antony James	JEC18CE009	antonyjames897@gmail.com	7510544375	CE
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5	Vijay Jacob	JEC18CE051	vijay.ce18@jecc.ac.in	9746387340	CE
6	Ansary H	JEC18CE008	ansary.ce18@jecc.ac.in	8281441465	CE
7	Gopika Prasanth.P	JEC18CE025	gopika.ce18@jecc.ac.in	8606074112	CE
8	Arjun P M	JEC18CE011	arjun.ce18@jecc.ac.in	8848662848	CE
9	Sneha Thomas	JEC18CE045	sneha.ce18@jecc.ac.in	9605015681	CE
10	Shabla. K	JEC18CE040	shabla.ce18@jecc.ac.in	9961176860	CE
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ADD-ON COURSE: Introduction to programming and problem solving in python

Sl No	NAME	Register Number	Email	Phone Number	Branch
1	Sinda Philomin M.B	JEC18EE026	sinda.ee18@jecc.ac.in	8921688942	EE
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4	Nibin Thomas	JEC18EC023	nibin.ec18@jecc.ac.in	7902806013	EC
5	Keerthi M	JEC18EE017	keerthi.ee18@jecc.ac.in	8157803475	EE
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19	Salini T M	JEC18EC033	salini.ec18@jecc.ac.in	6235472186	EC
20	Alex Davy	JEC18EC033	alex.ec18@jecc.ac.in	7902993451	EC

Reshma.K.V.

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STUDENT NAME LIST

ADD-ON COURSE: OOPS concepts in JAVA and algorithm analysis

Sl No	NAME	Register Number	Email	Phone Number	Branch
1	Shiza Shihab	JEC18CS081	shiza.cs18@jecc.ac.in	9526222784	CS
2	Jumana Hasin	JEC18CS055	jumanahazin43@gmail.com	9961652955	CS
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5	Nair Midhun Ramachandran	JEC18CS067	nmr6210@gmail.com	9074425538	CS
6	Vaishnav M	JEC18cs092	vaishnavmuralidharan.vv@gmail.com	9995543453	CS
7	Ashrul K	JEC18CS027	ashrulkunjumon@gmail.com	8943652503	CS
8	Charles Johnson	JEC18CS031	4harles.cs18@jecc.ac.in	7558822609	CS
9	Sarath C P	JEC18CS077	sarath.cs18@jecc.ac.in	7510102607	CS
10	Sourav K	JEC18CS083	sourav.cs18@jecc.ac.in	9446337766	CS
11	Sreekanth.P	JEC18CS086	sreekanth.cs18@jecc.ac.in	9400924000	CS
12	Harisanker P	JEC18CS045	harisanker.cs18@jecc.ac.in	9383479295	CS
13	Akhil Azeez Uppilamkunnath	JEC18CS010	akhil.cs18@jecc.ac.in	8157941046	CS
14	Sufail Badusha	JEC18CS088	sufail.cs18@jecc.ac.in	7034980298	CS
15	Rahul T Ravi	JEC18CS073	rahult.cs18@jecc.ac.in	8281718540	CS

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ADD-ON COURSE: Image Processing with MATLAB

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3	Ashique P S	JEC18MC010	ashique.mr18@jecc.ac.in	9496643971	MR
4	Jothis R Daas	JEC18MC022	jothis.mr18@jecc.ac.in	7034516551	MR
5	Haggin C Sajeev	JEC18MC019	haggin.mr18@jecc.ac.in	9496342833	MR
6	Arun Vinod	JEC18MC009	arun.mr18@jecc.ac.in	9562827007	MR
7	Basith Ali	JEC18MC013	basith.mr18@jecc.ac.in	8129950624	MR
8	Rakesh R Nair	JEC18EC026	rakesh.ec18@jecc.ac.in	9809788570	EC
9	Sahal Mohamed Nalakath	JEC18ME073	sahal.me18@jecc.ac.in	6282536525	ME
10	K.Vishnu	JEC18ME053	kanjullyvishnu12220@gmail.com	8594074348	ME
11	S Sreerag Menon	JEC18ME082	sreerag.me18@jecc.ac.in	9557115292	ME
12	Joshva joy	JEC18ME046	joshva.me18@jecc.ac.in	9995369476	ME
13	Jinto K T	JEC18MC020	jinto.mr18@jecc.ac.in	9961467754	MR
14	Geo V O	JEC18MC018	geo.mr18@jecc.ac.in	7306076639	MR
15	P K Sarath Sankar	JEC18EC025	sarath.ec18@jecc.ac.in	6238429906	ECE
16	Rameez N A	JEC18EC027	rameez.ec18@jecc.ac.in	8606823479	ECE

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Binedhu K Rejan

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STUDENT NAME LIST

ADD-ON COURSE: Introduction to Internet of Things

Sl No	NAME	Register Number	Email	Phone Number	Branch
1	Rahul S S	JEC18EE022	rahul.ee18@jecc.ac.in	9446635728	EE
2	Jelile Rosa Jose	JEC18EC020	jelile.ec18@jecc.ac.in	8086985675	EC
3	Jenet. K. Vincent	JEC18EC021	jenet.ec18@jecc.ac.in	9400457895	EC
4	Edwin T Joy	JEC18CS038	edwin.cs18@jecc.ac.in	8714818187	CS
5	B Mithra	JEC18EC013	mithra.ec18@jecc.ac.in	8304065418	EC
6	Rockson T. Augustine	JEC18CS076	rockson.cs18@jecc.ac.in	9567962152	CS
7	Shalu.H	JEC18EC036	shalu.ec18@jecc.ac.in	9544082414	EC
8	Catherine Willams	JEC18EC014	catherin.ec18@jecc.ac.in	9447741892	EC
8	Sanjay Krishna	JEC18EC035	sanjay.ec18@jecc.ac.in	9496291810	EC
9	Alwin Thomas	JEC18EC005	alwin.ec18@jecc.ac.in	8111960172	EC
10	Renjith K	JEC18EE023	renjithkooliyat@gmail.com	9188411233	EE
11	Anleya Anto	JEC18EE008	anleyaanto123@gamail.com	8943990476	EE
12	Justin AJ	JEC18ME048	justinaj018@gmail.com	9072881753	ME
13	Reshma Unnikrishnan	JEC18ME069	reshma.me18@jecc.ac.in	8086998674	ME
14	Ridhul Pauly	JEC18ME071	ridhulpauly29@gmail.com	9539387373	ME
15	Sreeram C P	JEC18ME081	sreeram.me18@jecc.ac.in	6282671705	ME
16	Mohammad Aqeel	JEC18ME058	muhammeda.me18@jecc.ac.in	8943072678	ME
17	Jovin Jelphy	JEC18ME047	jovin.me18@jecc.ac.in	6282507891	ME
18	Nirmal Nixon	JEC18ME063	nirmaln.me18@jecc.ac.in	8547801784	ME

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Jyothi ADD-ON Courses – S4 registration

We will be offering the following add-on courses for S4 students from 11th May 2021 onwards:

1. **PLANNING AND DRAFTING OF BUILDINGS**

2. **OOPS CONCEPTS IN JAVA AND ALGORITHM ANALYSIS**

3. **INTRODUCTION TO VHDL**

4. **INTRODUCTION TO MATLAB**

5. **COMPUTER AIDED DESIGN & INTRODUCTION TO SOLID WORKS**

Interested students are encouraged to register for the courses before Friday 30th April 2021. The afternoon sessions of every Tuesday's and Wednesday's will be utilized for the add-on courses in online mode. During contact classes schedule will be informed later. One student can join only a single course at a time. Students can log on to the following link for registration and the course details at: **http://tiny.cc/ADDONCOURSES4**

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LIST OF ADD-ON COURSES FOR THE ACADEMIC YEAR 2020-2021

Course Title	Staff in Charge & Cousre Handling Department	Allowed Department & Branch	Registration Fees
Planning and Drafting of Buildings	CE department faculties	S4 CE	RS 300/- REFUND : RS 200/-
OOPS concepts in JAVA and algorithm analysis	Mr. Bineesh M (CSE) Ms. Sobha Xavier (CSE)	S4 CSE	RS 300/- REFUND : RS 200/-
Introduction to VHDL	Mr. Kapil Das K S (EEE)	S4 CSE, ECE, EEE	RS 300/- REFUND : RS 200/-
Introduction to MATLAB	Dr. Rajalakshmi R (MR)	S4 EEE/ECE/ MR/ CSE	RS 300/- REFUND : RS 200/-
Computer Aided Design and Introduction to Solid Works	Mr. Christy V Vazhappilly (ME)	S4 All branches	RS 300/- REFUND : RS 200/-

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STUDENT NAME LIST

ADD-ON COURSE: Planning and Drafting of Buildings

Sl No	NAME	Register Number	Email	Phone Number	Branch
1	Liya Saji	JEC19CE017	liya.ce19@jecc.ac.in	8113860594	CE
2	Gayathry N P	JEC19CE009	gayathry.ce19@jecc.ac.in	7356971599	CE
3	Jeena Johnson	JEC19CE011	jeena.ce19@jecc.ac.in	9747416497	CE
4	Architha kp	JEC19CE007	architha.ce19@jecc.ac.in	9961858510	CE
5	Tez Treesa Joseph	JEC19CE025	tesstreesajoseph@gmail.com	7907680735	CE
6	Anjali Santo	JEC19CE004	anjalisantotcr@gmail.com	6238513365	CE
7	Swetha Suresh T	JEC19CE024	swethasuresht2001@gmail.com	6282492800	CE
8	Navya Santhosh	JEC19CE020	navya.ce19@jecc.ac.in	6235633760	CE
9	Aleesha p Maxwell	JEC19CE001	maxwellaleesha1@gmail.com	8157029870	CE
10	Shilja K.S	LJEC19CE035	s1.ce@jecc.ac.in	9400446003	CE
11	Sneha Suresh	LJEC19CE036	s2.ce@jecc.ac.in	7736742828	CE
12	Harsha Narayanan	LJEC19CE032	s3.ce@jecc.ac.in	7558951829	CE

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Mechanical Engineering valid for the academic years 2016-2022, NBA accredited B.Tech Programme in Civil Engineering valid for the academic years 2019-2022.

STUDENT NAME LIST

ADD-ON COURSE: OOPS concepts in JAVA and algorithm analysis

Sl No	NAME	Register Number	Email	Phone Number	Branch
1	Ann Rose Jenson	JEC19CS030	ann.cse19@jecc.ac.in	8714817250	CS
2	Alan Shaju	JEC19CS014	alan.cse19@jecc.ac.in	9947371834	CS
3	Aashish Joseph George	JEC19CS001	aashish.cse19@jecc.ac.in	9447253984	CS

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STUDENT NAME LIST

ADD-ON COURSE: Introduction to MATLAB

Sl No	NAME	Register Number	Email	Phone Number	Branch
1	Maria Rose Thayil	JEC19CS060	maria.cse19@jecc.ac.in	8330896451	CS
2	Deo Saju	JEC19CS044	deo.cse19@jecc.ac.in	9061947458	CS
3	Alfred Francis	JEC19CS021	alfredfrancis.cse19@jecc.ac.in	9188258966	CS
4	Sana Said	JEC19EC023	sana.ece19@jecc.ac.in	9539089930	EC
5	Sayana. S	JEC19EC026	sayana.s.ece19@jecc.ac.in	7012874724	EC
6	Naveen Rajesh	JEC19EC022	naveen.ece19@jecc.ac.in	8943470028	EC
7	Anjali Aravind	JEC19EC006	anjaliaravind.ece19@jecc.ac.in	9847029617	EC
8	Liviya Viju	JEC19EE011	liviya.eee19@jecc.ac.in	9946358306	EE
9	Avarnya Sabu	JEC19EE006	avarnya.eee19@jecc.ac.in	9995272609	EE
10	Victor Varghese	JEC19EE017	victor.eee19@jecc.ac.in	7909112577	EE
11	Mohammed Ameer	JEC19MC031	Am9846015786@gmail.com	9846015786	MR
12	Benat Jose	JEC19MC015	benat.mc19@jecc.ac.in	8078039407	MR
13	Akshay P G	JEC19MC003	akshay.mc19@jecc.ac.in	9562050408	MR
14	Aswin A Vinoy	JEC19MC013	aswin.mc19@jecc.ac.in	8943958370	MR
15	Rhea Samuel	JEC19EE012	rhea.eee19@jecc.ac.in	7034497197	EE

M. Rajesh

Dr. M. RAJALAKSHMI

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STUDENT NAME LIST

ADD-ON COURSE: Computer Aided Design and Introduction to Solid works

Sl No	NAME	Register Number	Email	Phone Number	Branch
1	Alby Thomas Zacharia	JEC19MC005	alby.mc19@jecc.ac.in	9061157609	MR
2	Allen George Jose	JEC19MC006	allen.mc19@jecc.ac.in	7356650397	MR
3	Ameen Ks	JEC19MC009	ameen.mc19@jecc.ac.in	9747200582	MR
4	Derik Yakov Joby	JEC19MC017	derik.mc19@jecc.ac.in	7593057549	MR
5	Ebin Tom	JEC19MC020	ebin.mc19@jecc.ac.in	8078218751	MR
6	Emil Kitho N C	JEC19MC021	emil.mc19@jecc.ac.in	9400281360	MR
7	Francis Menuhin	JEC19MC024	francis.mc19@jecc.ac.in	9074895563	MR
8	Joseph Paul T	JEC19MC029	josephpaul.mc19@jecc.ac.in	8921555356	MR
9	Mikhil Manoj Chandy	JEC19MC030	mikhilmanoj19@gmail.com	8330070816	MR
10	Roffin Joseph	JEC19MC036	roffin.mc19@jecc.ac.in	7559001725	MR
11	S Reghuraj	JEC19MC042	sreghuraj.mc19@jecc.ac.in	8281569997	MR
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13	Adharsh.Prakash	JEC19ME005	adharsh.me19@jecc.ac.in	9500113108	ME
14	Adithya Jyothis	JEC19ME006	adithya.me19@jecc.ac.in	8075452768	ME
15	Arjun	JEC19ME020	arjun.me19@jecc.ac.in	9539599754	ME
16	Arun Giri	JEC19ME022	arun.me19@jecc.ac.in	9995125164	ME
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19	Giridhar J	JEC19ME030	giridhar.me19@jecc.ac.in	8330077459	ME
20	Hamil Sunny	JEC19ME032	hamil.me19@jecc.ac.in	8547456403	ME
21	Mohammed Ibrahim Shah M A	JEC19ME038	mohammedibrahim.me19@jecc.ac.in	8606764649	ME
22	Mohammed Jabir Ali C	JEC19ME039	mohammedjabir.me19@jecc.ac.in	9497811456	ME
23	Muhammed Anshif M M	JEC19ME042	muhammedanshif.me19@jecc.ac.in		ME
24	Nidhin Thomas	JEC19ME044	nidhin.me19@jecc.ac.com	7736510136	ME
25	P J Bijesh	JEC19ME045	pjbijesh.me19@jecc.ac.in	8137055526	ME
26	Rahul E R	JEC19ME048	rahul.me19@jecc.ac.in	7356361523	ME
27	Saibin Bose	JEC19ME051	saibin.me19@jecc.ac.in	8592074045	ME
28	Sooraj S	JEC19ME055	soorajsanthosh82@gmail.com	9744267300	ME
29	Sreeraj Krishnan.K	JEC19ME058	sreerajkrishnan.me19@jecc.ac.in	9539915650	ME

Thmoly V Vazhepily

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LEADERS OF TOMORROW
ESTD 2002

Certificate of Completion

This certifies that Mr./Ms._____ has successfully completed the forty hours add-on course on_____ conducted by Jyothi Engineering College, Cheruthuruthy, during April-October 2021.

COURSE COORDINATOR

Dr. SUNNY JOSEPH KALAYATHANKAL
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SECRETARY & CAMPUS HEAD

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Competitive Exam Details
Academic Year 2020-2021

Sl No	Registration number/roll number for the exam	Names of students selected/ qualified	Competitive Exams		
			GATE	GRE	IELTS
1	164877	NIMMI ROSE ANTO			YES
2	568447	ANJU AGNES			YES
3	345762	MAHIMA MARY THOMAS			YES
4	164879	ANGEL LAWRENCE			YES
5	105048	VINAYAK VINOD			YES
6	2286	ROHITH KRISHNA			YES
7	340490	JUDISH XAVIER			YES
8	350837	CRISTO FLOYD C			YES
9	479780	ARUN SHAJU			YES
10	116573	JOHN P RAJ			YES
11	70275	JOSE JOSEPH			YES
12	70062	JOSHWIN EMMANUEL JOHNSON			YES
13	CS21S61329344	MANEESH MANOJ	YES		
14	CS21S51329142	DIVYA PETER	YES		
15	U5217543	SREEHARI T ANIL			YES

True Copy Attested

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16	P4657114	ALPHIN GEORGE ANSON			
17	571603	MARIA ANN TOMS		YES	
18	S5011486	ANU C JAISON			YES

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GATE 2021 Scorecard

Graduate Aptitude Test in Engineering (GATE)
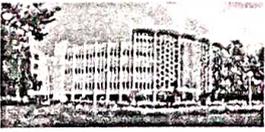
GATE 2021

Organising Institute
Indian Institute of Technology Bombay

Candidate's Details

Name

DIVYA PETER

Parent's / Guardian's Name

T P PETER

Registration Number

CS21S51329142

Date of Birth

20-Jul-1999

Examination Paper

Computer Science and Information Technology (CS)

(Candidate's Signature)

Performance

GATE Score	366
Marks out of 100*	27.38

Qualifying Marks**		
26.1	23.4	17.4
General	EWS/OBC (NCL)	SC/ST/PwD

Number of Candidates Appeared in this paper 101922

All India Rank in this paper 13213

Valid up to 31st March 2024

* Normalized marks for Civil Engineering (CE), Computer Science and Information Technology (CS) and Mechanical Engineering (ME) Papers.

** A candidate is considered qualified if the marks secured are greater than or equal to the qualifying marks mentioned for the category for which valid category certificate, if applicable, is produced along with this scorecard.

19ᵗʰ March 2021

Prof. Deepankar Choudhury
Organising Chairperson, GATE 2021
(on behalf of NCB - GATE, for MoE)

0423f66e5b17c2b1af4277047ce8b175

The GATE 2021 score is calculated using the formula

$$GATE\ Score = S_q + (S_t - S_q)\frac{(M - M_q)}{(\bar{M}_t - M_q)}$$

where,
M is the marks obtained by the candidate in the paper, mentioned on this GATE 2021 scorecard
M_q is the qualifying marks for general category candidate in the paper
$\bar{M}_t$ is the mean of marks of top 0.1% or top 10 (whichever is larger) of the candidates who appeared in the paper (in case of multi-session papers including all sessions)
S_q = 350, is the score assigned to M_q
S_t = 900, is the score assigned to $\bar{M}_t$

In the GATE 2021 score formula, M_q is 25 marks (out of 100) or $\mu + \sigma$, whichever is greater. Here μ is the mean and σ is the standard deviation of marks of all the candidates who appeared in the paper.

Qualifying in GATE 2021 does not guarantee either an admission to a post-graduate program or a scholarship/assistantship. Admitting institutes may conduct further tests and interviews for final selection.

Codes for XE and XL Paper Sections (compulsory section and any other two sections)

XE: Engineering Sciences
A – Engineering Mathematics (compulsory)
B – Fluid Mechanics
C – Materials Science
D – Solid Mechanics
E – Thermodynamics
F – Polymer Science and Engineering
G – Food Technology
H – Atmospheric and Oceanic Sciences

XL: Life Sciences
P – Chemistry (compulsory)
Q – Biochemistry
R – Botany
S – Microbiology
T – Zoology
U – Food Technology

True Copy Attested

Graduate Aptitude Test in Engineering (GATE) 2021 was organized by Indian Institute of Technology Bombay on behalf of the National Coordination Board (NCB) - GATE for the Department of Higher Education, Ministry of Education (MoE), Government of India.

TEST TAKER SCORE REPORT
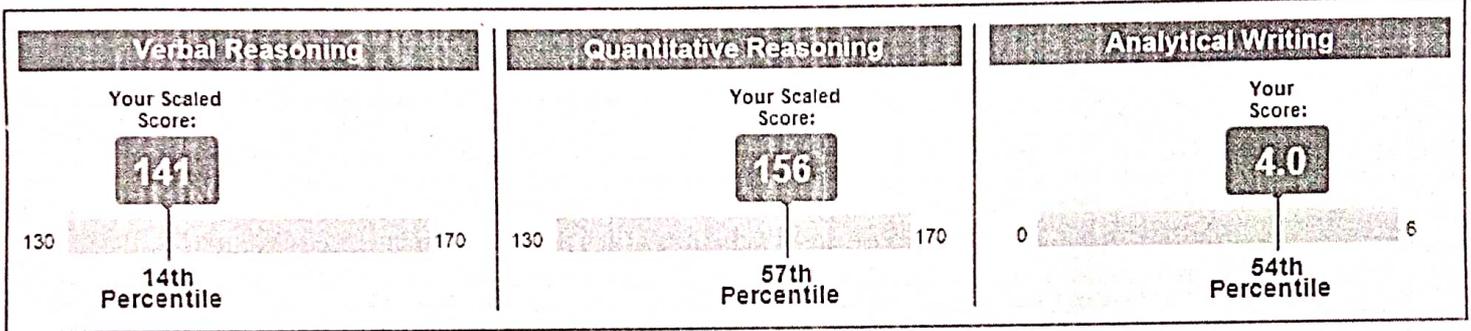
Note: This report is not valid for transmission of scores to an institution.

MARIA ANN TOMS

Address: CHIRAMAL HOUSE, LUCY FENCE, KORATTY P O, THRISSUR, 680308
India

Email: maria.anntoms1997@gmail.com
Phone: 91-8304036082
Date of Birth: May 7, 1997
Social Security Number (Last Four Digits):
Gender: Female
Intended Graduate Major: Other Fields - Not Listed (5199)

Most Recent Test Date: March 14, 2022

Registration Number: 0571603
Print Date: March 24, 2022

Your Scores for the General Test Taken on March 14, 2022

Verbal Reasoning	Quantitative Reasoning	Analytical Writing
Your Scaled Score: **141**	Your Scaled Score: **156**	Your Score: **4.0**
130 — 170	130 — 170	0 — 6
14th Percentile	57th Percentile	54th Percentile

Your Test Score History

General Test Scores

Test Date	Verbal Reasoning Scaled Score	Verbal Reasoning Percentile	Quantitative Reasoning Scaled Score	Quantitative Reasoning Percentile	Analytical Writing Score	Analytical Writing Percentile
March 14, 2022	141	14	156	57	4.0	54

Subject Test Scores

You do not have reportable test scores at this time.

Your Score Recipient(s)

Undergraduate Institution

Report Date	Institution (Code)	Department (Code)	Test Title	Test Date
March 23, 2022	INDIANA UNIV BLOOMINGTON (1324)	ANY DEPARTMENT NOT LISTED (5199)	General Test	March 14, 2022

Designated Score Recipient(s)

Report Date	Score Recipient (Code)	Department (Code)	Test Title	Test Date
March 23, 2022	UNIV DALLAS (6868)	ANY DEPARTMENT NOT LISTED (5199)	General Test	March 14, 2022

(ETS) **GRE**

TEST TAKER SCORE REPORT
Note: This report is not valid for transmission of scores to an institution.

MARIA ANN TOMS

Date of Birth: May 7, 1997

Most Recent Test Date: March 14, 2022

Registration Number: 0571603
Print Date: March 24, 2022

About Your GRE® Score Report

Score Reporting Policies

With the *ScoreSelect*® option, you can decide which test scores to send to the institutions you designate. There are three options to choose from:

- Most Recent option – Send your scores from your most recent test administration

- All option – Send your scores from all administrations in the last five years

- Any option – Send your scores from one OR as many test administrations in the last five years (this option is not available on test day when you select up to four FREE score reports)

Scores for a test administration must be reported in their entirety. Institutions will receive score reports that show only the scores that you selected to send to them. There will be no special indication if you have taken additional GRE tests. See the *GRE® Information Bulletin* for details. The policies and procedures explained in the Bulletin for the current testing year supersede previous policies and procedures in previous bulletins.

Scores will be sent to designated score recipients approximately 10-15 days after a computer-delivered test and 5 weeks after a paper-delivered test. If your scores are not available for any reason, you will see "Not Available" in Your Test Score History.

GRE test scores are reportable according to the following policies:

- For tests taken prior to July 1, 2016, scores are reportable for five (5) years following the testing year in which you tested (July 1 – June 30). For example, scores for a test taken on May 15, 2015, are reportable through June 30, 2020. GRE scores earned prior to August 2011 are no longer reportable.

- For tests taken on or after July 1, 2016, scores are reportable for five (5) years following your test date. For example, scores for a test taken on July 3, 2016, are reportable through July 2, 2021.

Note: Score recipients will only receive scores from test administrations that you have selected to send to them.

Percentile Rank (% Below)

A percentile rank for a test score indicates the percentage of test takers who took that test and received a lower score. Regardless of when the reported scores were earned, the percentile ranks for General Test and Subject Test scores are based on the scores of all test takers who tested within the most recent three-year period.

Retaking a GRE Test

You can take the *GRE®* General Test *once every 21 days*, up to *five times* within any continuous rolling 12-month period (365 days). This applies even if you canceled your scores on a test taken previously. You can take the paper-delivered GRE General Test and *GRE®* Subject Tests as often as they are offered.

Note: This policy will be enforced even if a violation is not immediately identified (e.g., inconsistent registration information) and test scores have been reported. In such cases, the invalid scores will be canceled and score recipients will be notified of the cancellation. Test fees will be forfeited.

For More Information

For information about interpreting your scores, see *Interpreting Your GRE Scores* at www.ets.org/gre/understand .

For detailed information about your performance on the Verbal Reasoning and Quantitative Reasoning sections of the computer-delivered GRE General Test, access the free GRE Diagnostic Service from your ETS account. This service includes a description of the types of questions you answered right and wrong, the difficulty level of each question, and the time spent on each question. This service is available approximately 15 days after your test administration and for six months following your test administration.

If you have any questions concerning your score report, email GRE Services at gre-info@ets.org or call 1-609-771-7670 or 1-866-473-4373 (toll free for test takers in the U.S., U.S. Territories and Canada) between 8 a.m. and 7:45 p.m. (New York Time).

IELTS™

Test Report Form

NOTE Admission to undergraduate and post graduate courses should be based on the ACADEMIC Reading and Writing Modules
GENERAL TRAINING Reading and Writing Modules are **not** designed to test the full range of language skills required for academic purposes.
It is recommended that the candidate's language ability as indicated in this Test Report Form be re-assessed **after two years** from the date of the test.

Centre Number	IN855	Date	12/AUG/2021	Candidate Number	164877

Candidate Details

Family Name	ANTO
First Name	NIMMI ROSE
Candidate ID	U8041321

Date of Birth	01/05/1999	Sex (M/F)	F	Scheme Code	Private Candidate

Country or Region of Origin	
Country of Nationality	INDIA
First Language	MALAYALAM

Test Results

Listening	8.0	Reading	6.5	Writing	6.5	Speaking	7.0	Overall Band Score	7.0	CEFR Level	C1

Administrator Comments

Centre stamp

idp
IELTS TEST CENTRES
IN855

Validation stamp

VALIDATION STAMP
IELTS

True Copy Attested

Administrator's Signature		
Date	25/08/2021	Test Report Form Number	21IN164877ANTN855A

IELTS™

Test Report Form

ACADEMIC

Centre Number	IN855	Date	23/OCT/2021	Candidate Number	345762

Candidate Details

Family Name	MARY THOMAS
First Name	MAHIMA
Candidate ID	T4840875

Date of Birth	25/04/1996	Sex (M/F)	F	Scheme Code	Private Candidate

Country or Region of Origin	
Country of Nationality	INDIA
First Language	MALAYALAM

Test Results

Listening	9.0	Reading	7.5	Writing	7.5	Speaking	8.0	Overall Band Score	8.0	CEFR Level	C1

Administrator Comments

Centre stamp

idp
IELTS TEST CENTRES
IN855

Validation stamp

IELTS

Administrator's Signature

True Copy Attested

Date 05/11/2021

Test Report Form Number: 21IN345762MARM855A

IELTS™

Test Report Form

ACADEMIC

NOTE Admission to undergraduate and post graduate courses should be based on the ACADEMIC Reading and Writing Modules
GENERAL TRAINING Reading and Writing Modules are **not** designed to test the full range of language skills required for academic purposes
It is recommended that the candidate's language ability as indicated in this Test Report Form be re-assessed **after two years** from the date of the test

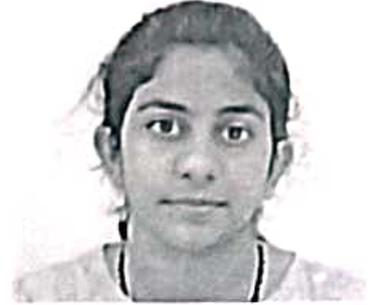| Centre Number | IN855 | Date | 30/DEC/2021 | Candidate Number | 568447 |

Candidate Details

Family Name	AYNIKKAL
First Name	ANJU AGNES
Candidate ID	U7755348

| Date of Birth | 20/11/1998 | Sex (M/F) | F | Scheme Code | Private Candidate |

Country or Region of Origin	
Country of Nationality	INDIA
First Language	MALAYALAM

Test Results

| Listening | 7.0 | Reading | 6.0 | Writing | 6.0 | Speaking | 6.0 | Overall Band Score | 6.5 | CEFR Level | B2 |

Administrator Comments

Centre stamp

idp
IELTS TEST CENTRES
IN855

Validation stamp

IELTS

True Copy Attested

Administrator's Signature

| Date | 13/01/2022 | Test Report Form Number | 21IN568447AYNA855A |