Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION

AICTE Approved & NAAC Accredited

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT REPORT
(Odd Semester 2019-20)

Conducted by

External Experts

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
AICTE Approved & NAAC Accredited

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT REPORT
(Odd Semester 2019-20)

Conducted by

External Experts

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
AICTE Approved & NAAC Accredited
Karunya Nagar, Coimbatore 641 114, Tamil Nadu, India.

Academic Course File Auditing Odd Semester 2019-20

The list of Course file Auditors audited for the Odd Semester of the Academic Year 2019-20 are given below:

S.No.	Department	External Expert
1.	Civil Engineering	Dr. N. Ganesan Professor, NIT Calicut
2.	Mechanical Engineering	Dr. Vincent Herald Wilson Professor, VIT, Vellore
3.	Aerospace Engineering	Dr. P. Manivannan, Professor, Hindustan University, Chennai
4.	Electronics and Communication Engineering	Dr. Lyla B. Das Associate Professor, NIT - Calicut
5.	Electrical and Electronics Engineering	Prof. SanjeebMohanty Associate Professor, NIT - Rourkela
6.	Biomedical Engineering & Robotics and Automation Engg	Dr. Elizabeth Rufus Professor, VIT, Vellore.
7.	Computer Science and Engineering	Dr. P. SanthiThilagam, Professor & Head, NITK, Surathkal.
8.	Biotechnology	Dr. Arnold Emerson I Associate Professor, VIT-Vellore
9.	Food Processing Technology	Dr. N. Venkatachalapathy, Professor & Head Dept. of Food Engineering, IIFPT, Thanjavur
10.	Agriculture and Horticulture	Dr. Paul Mansingh J, Associate Professor, VIT, Vellore
11.	Mathematics	Dr. Sunil Jacob John, Professor of Mathematics, NIT, Calicult.
12.	Applied Physics and Nano-sciences	Dr. Jayakumar Balakrishnan Assistant Professor, IIT, Palakkad.
13.	Applied Chemistry	Dr. Lisa Sreejith Professor, NIT Calicut
14.	English	Dr. John Joseph Kennedy P Professor, Christ University, Bangalore
15.	Management Studies	Dr. Sheena Associate Professor, NITK, Surathkal
16.	Commerce and International Trade	Dr. Dunstan Rajkumar Associate Professor, VIT, Vellore
17.	Digital Sciences	Dr. Jaidhar C.D. Associate Professor, NITK - Suratkal

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
AICTE Approved & NAAC Accredited
Karunya Nagar, Coimbatore 641 114, Tamil Nadu, India

External Course File Audit Report

Odd Semester of the Academic year 2019-20

Contents

S. No.	Date of Audit	Department	Page No.
1.	20.07.2020	Civil Engineering	1-3
2.	10.08.2020	Mechanical Engineering	4-8
3.	12.08.2020	Aerospace Engineering	9-10
4.	14.07.2020	Electronics and Communication Engineering	11-16
5.	13.07.2020	Electrical and Electronics Engineering	17-19
6.	10.08.2020	Instrumentation Engineering	20-22
7.	20.08.2020	Computer Science and Engineering	23-26
8.	13.07.2020	Biotechnology	27-29
9.	28.07.2020	Food Processing Technology	30-32
10.	14.08.2020	Agriculture	33-37
11.	16.07.2020	Mathematics	38-41
12.	21.07.2020	Applied Physics	42-43
13.	04.07.2020	Applied Chemistry	44-46
14.	18.07.2020	English	47-50
15.	21.07.2020	Nanoscience	51-52
16.	25.07.2020	Management Studies	53-55
17.	08.08.2020	Commerce and International Trade	56-57
18.	18.07.2020	Digital Sciences	58-61

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

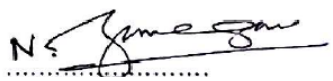
DEPARTMENT OF CIVIL ENGINEERING

EXTERNAL AUDIT REPORT

Name of the Department	Civil Engineering
Name of the School	Engineering and Technology
Name and Address of the External Auditor	Dr. N. Ganesan Professor (HAG) NIT Calicut
Auditing Date	14-07-2020 to 20-07-2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. More weightage may be given for basic ideas while setting the question paper.
2. While answering questions ,many students are not giving units along with magnitudes . Faculty members may insist on the above.
3. Dimensions of figures in the question paper should be in mm.
4. Students have to be encouraged to draw as many drawings as possible while answering questions in the case of design subjects.
5. While teaching design subjects, students may be taken to various parts the buildings / structures /field for understanding the connectivity of the structural elements .
6. Case studies based on the consultancy work carried out by the faculty may be discussed in the classes for inspiring students to learn the subject with interest.
7. In the action taken report, it is noted that many faculty members have utilized a single action such as Tutorial or Extra classes. This may be alright when the number of failures is less. However, when there are many failures, at least two actions need to be considered.
8. Targets set for attainment of CO are widely varying from course to course.



Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : Civil Engineering									
	School : School of Engineering and Technology									
	Name and Address of the Auditor : Dr. N. Ganesan, Professor, NIT Calicut									
	Date of Audit : 20.07.2020									
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Teaching Plan / Class Handled Report**	**IA1-IA3 Question paper and answer script**	**Quality Assess-ments**	**Attain-ment of CO and PO**	**Inno-vative Teaching Practices**	**Students Feedback from Eduserve**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. G. PRINCE ARUL RAJ	17CE2009	Design of reinforced concrete elements	9	8	9	8	4	3	41
2	Mr. A. ARUN SOLOMON	14CE2036	Prefabricated Structures	9	8	8	8	3	4	40
3		18CE3011	Advanced Solid Mechanics	9	8	8	8	3	3	39
4	Dr. C. GAJENDRAN	14CE2039	Solid Waste Management	9	8	8	7	4	4	40
5		18CE3045	Environmenta l Impact Assessment	8	8	8	7	4	5	40
6	Dr. R. MERCY SHANTHI	18CE3013	Finite Element Methods in structural Engineering	9	8	8	6	4	3	38
7		14CE2046	Smart Materials and Structures	9	8	8	6	4	3	38
8	Dr. C. FREEDA CHRISTY	18CE3023	Design of Advanced Reinforce Concrete Structures	8	8	8	8	4	4	40
9		18MS3108	Cost Management For Engineering Projects	8	8	8	8	4	5	41
10	Dr. J. BREMA	18CE2015	Fluid Mechanics	6	7	8	7	2	3	33
11		18CE3036	Surface Flow Hydrology	8	8	7	7	2	0	32
12	Dr. N. ANAND	18CE2036	Prefabricated Structures	8	8	8	8	4	4	40
13		18CE3022	Advanced Steel Design	9	8	8	8	4	5	42
14	Dr. S. VINCENT SAM	17CE2012	Construction practices	8	8	8	8	3	3	38

15	JEBADURAI	19CE2001	Civil Engineering - Societal and Global Impact	8	9	8	8	3	4	40
16	Mr. E. ARUNRAJ	18CE2017	Surveying and Geomatics	8	8	8	8	3	4	39
17	Dr. SNEHA GAUTAM	18CE3035	Atmospheric Environmental Pollution and Control	8	7	8	8	4	4	39
18		17CE2042	Environmental and social impact assessment	8	8	8	8	4	4	40
19		14CE2038	Industrial waste treatment and disposal	8	8	8	7	4	4	39
20		14CE2039	Solid Waste Management	8	8	8	5	4	4	37
21	Mr. I. ANTONY GODWIN	18CE2008	Engineering Mechanics	9	8	7	7	5	0	36
22		17CE2013	Foundation Engineering	9	8	7	5	5	0	34
23		18CE3081	Professional Practices in Design of Geotechnical Structures	8	8	7	0	5	0	28
24	Mr. S. JANAKI RAMAN	19CE2002	Energy Science and Engineering	7	7	7	8	4	3	36
25		18CE2007	Geology and Materials	8	8	7	8	4	3	38
26	Mr. D. SAMUEL ABRAHAM	14CE2028	Construction Management	9	8	8	8	5	4	42
27		14CE2046	Smart Materials and Structures	9	8	8	8	5	4	42
28	Ms. J. BLESSY	18CE3037	Environmental Chemistry and Microbiology	8	8	8	0	0	4	28
29		18CE3044	Solid and hazardous waste management	8	8	8	0	0	4	28
30	Dr. G. HEMALATHA	18CE3012	Structural Dynamics	9	8	8	6	5	4	40

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF MECHANICAL ENGINEERING

EXTERNAL AUDIT REPORT

Name of the Department	Mechanical Engineering
Name of the School	Engineering and Technology
Name and Address of the External Auditor	Dr. Vincent Herald Wilson D Professor Grade 1 School of Mechanical Engineering Vellore Institute of Technology Vellore
Auditing Date	10th August, 2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. Overall the course files format and the way it is maintained is well appreciated. 2.Quality assessment component needs improvement. Its monotonous and no variety at all. All have done only assignment types and few on MCQs. No proof attached for the list of models and mini projects as claimed by certain few faculty members. There are no initiatives taken for patent application and registration even though all of the staff have it as a PSO.

3. Some faculty have not understood the concept of course outcome. So, they have dealt with only lower level components of learning like **"remember"** and **"understand".**

4. The column on 'Date on which the topic taught' as well can be removed because no one has recorded and it remains empty.

5. Dr.H. Sharon in Refrigeration and Air conditioning, has completed 18 (Lectures 49 -59) topics on a single day (12-11-2019) in two hours. Page 10 & 11 of the course file. May be copy and pasted. Care not taken. Staff have done copy and paste.

6. Subject code :18ME3011 for the paper Reg No: PRK19ME5001 for question number 2 the marks awarded are 12 but total given as 14. Total mistakes. So, some method for a

cross check on total marks is a must so that students are not affected. Only three papers are taken as sample out of around 60 and even the papers kept for audit should have been at least verified for addition before submission. This is only a sample.

7. Mostly it is understood that the target is fixed after the marks are awarded so that it matches with the marks and the whole purpose of **continual improvement** concept is lost. One sample: Dr. George Samuel Raj, Subject Code: 7ME2018 Thermal Engineering II has fixed target as 70 & 80 for other COs and 50 for CO4. Why this gross variation in fixing the target? This is a proof that targets are fixed after the process of evaluation and there is no motivation for the staff for continual improvement.

8. It is disappointing that no industrial visits are arranged or mentioned as an as part of learning. Students may not have the exposure on the real time problems and challenges. What is claimed as an innovative practice (assignments) is a very common practice and doesn't involve any innovation.11 options are given under the heading, **"Details about quality assessment"** and Deans can insist and instruct the staff to follow at least a few of them instead of all of them choosing only the assignment.

9. Arranging for at least one guest lecture class and also a guest lecture by foreign Professor would be a good practice and would encourage students and staff leading to some collaborative works.

The above suggestions and pointing out are only for fine tuning the system and not for blaming anybody.

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : Mechanical Engineering									
	School : Engineering and Technology									
	Name and Address of the Auditor : Dr. Vincent Herald Wilson D., Professor Grade 1 - VIT, Vellore.									
	Date of Audit : 10.8.2020									
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Attainment of Course Outcomes**	**Innovative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. L. Godson Asirvatham	18ME2036	Thermodynamics	9	10	9	9	4	4	45
2	Dr. D.S. Robinson Smart	17ME2020	Design of machine elements	9	8	5	8	3	4	37
3		18ME3013	Engineering materials application	8	8	5	8	3	4	36
4	Dr. K. Leo Dev Wins	14ME2046	Metal cutting theory and practice	8	8	6	7	3	4	36
5		18ME2022	Manufacturing Technology	8	8	6	7	3	4	36
6	Dr. P. Sam Paul	18ME3018	Finite element methods in Engineering	8	8	6	8	4	4	38
7	Dr.G.Ganesan	17ME2019	Dynamics of machinery	8	9	5	7	3	4	37
8		18ME2012	Strength of materials	8	7	5	7	3	4	35
9	Dr. S.J. Vijay	14ME2045	Rapid prototyping and tooling	7	4	3	7	2	3	26
10	Dr. S. Antony Raja	18ME2001	Thermodynamics, Refrigeration and air conditioning	8	7	6	8	3	4	36
11		18ME3005	Refrigeration system design	8	8	0	5	3	3	27
12	Dr. A. Brusly Solomon	18ME2039	Fluid mechanics and machines	8	8	6	7	3	4	36
13		14ME2051	Refrigeration and air conditioning	8	9	8	7	3	4	39
14	Dr. D. Philip Selvaraj	14ME2046	Metal cutting theory and practice	8	8	7	7	4	4	38
15		17ME2018	Thermal Engineering - II	9	8	8	8	4	4	41
16	Dr. R. Raja	14MA2018	Operation research II	8	8	7	7	4	4	38
17		14ME2043	Industrial Engineering	8	8	7	6	3	4	36
18	Dr. B. Jefferson Raja Bose	17ME2018	Thermal Engineering - II	8	7	7	9	4	4	39

19	Dr. Rajakumar S. Rai	17ME2019	Dynamics of machinery	8	9	7	8	4	4	40
20		18ME2003	Theory of machines	9	8	7	7	4	4	39
21	Dr. S. Joseph John Marshal	17ME2018	Thermal Engineering - II	8	8	6	7	3	4	36
22		14ME2051	Refrigeration and air conditioning	8	8	6	7	3	4	36
23	Dr. M. Wilson Kumar	14ME2037	Product design and development strategies	9	8	8	8	3	4	40
24		14ME2045	Rapid prototyping and tooling	8	8	7	8	3	4	38
25	Dr. Kondru Gnana Sundari	17ME2001	Engineering mechanics	8	7	8	8	4	4	39
26		18ME2027	Fundamentals of thermal sciences and fluid mechanics	8	8	8	7	3	4	38
27	Dr. Sabitha Jannet	14ME2040	Design for manufacture	8	8	7	5	4	4	36
28		18ME3038	Flexible manufacturing systems	8	8	8	6	4	4	38
29	Dr. Gadudasu Babu Rao	17ME2019	Dynamics of machinery	8	7	8	7	4	4	38
30		17ME2026	Fluid power control Engineering	8	7	7	7	4	4	37
31	Dr. J. David Rajaselvam	17ME2054	Industrial safety Engineering	9	8	9	7	4	4	41
32		18ME2022	Manufacturing Technology	7	8	8	8	3	4	38
33	Mrs. C. Prabha	14ME2051	Refrigeration and air conditioning	7	8	8	7	4	4	38
34	Mr. S. Emerald Ninolin	14MA2018	Operation research II	8	8	7	6	4	4	37
35	Dr. M. Suresh	17ME2054	Industrial safety Engineering	8	9	8	6	4	4	39
36	Mr. Kalakanda Alfred Sunny	18ME2039	Fluid mechanics and fluid machinery	7	7	6	4	4	3	31
37	Dr. I. Kantharaj	14ME2046	Metal cutting theory and practice	9	9	8	8	4	4	42
38		18ME3010	Advanced manufacturing processes	9	9	9	8	4	4	43
39	Dr. Lijin George	17ME2019	Dynamics of machinery	9	9	8	9	4	4	43
40	Dr. Mona Sahu	17ME2019	Dynamics of machinery	8	7	7	7	4	4	37
41		18ME2032	Mechanics of solids	7	8	7	8	4	4	38
42	Mr.Balasubramanium	17ME2020	Design of machine elements	8	8	7	8	4	4	39
43		17ME2026	Fluid power control Engineering	8	7	8	7	4	4	38
44	Mr. S. Mohanasundaram	14ME2045	Rapid prototyping and tooling	7	7	6	6	4	3	33
45	Mr. S. Rajesh Ruban	17ME2054	Industrial safety Engineering	8	8	6	7	4	4	37
46		17ME2026	Fluid power control	8	8	7	7	4	4	38

			Engineering							
47	Mr. G. Lawrance	14ME2046	Metal cutting theory and practice	8	8	8	7	4	4	39
	Mr. X. Ajay Vasanth	14MA2018	Operation research II	8	8	7	7	4	4	38
49		18ME2012	Strength of materials	8	7	8	7	4	4	38
50	Mr. P. Jayaseelan	14ME2047	Welding technology	7	6	7	6	4	4	34
51		17ME2020	Design of machine elements	8	7	7	6	4	4	36
52	Mr. D.S. Ebenezer Jacob Dhas	14MA2018	Operation research II	8	7	8	6	4	4	37
53	Mr. Allen Varughese	17ME2054	Industrial safety Engineering	9	8	7	7	4	4	39
54		17ME2018	Thermal Engineering - II	8	8	7	7	4	4	38
55	Mr. E. Daniel	17ME2026	Fluid power control Engineering	8	7	7	8	4	4	38
56		14ME2045	Rapid prototyping and tooling	8	8	7	7	4	4	38
57	Mr. George Samuel Raj V	18ME2036	Thermodynamics	8	8	7	7	4	4	38
58		17ME2018	Thermal Engineering - II	8	7	8	6	4	4	37
59	Dr.Sharon	14ME2051	Refrigeration and air conditioning	4	6	5	6	4	3	28
60	Dr. D. Arul Kirubakaran	17ME2020	Design of machine elements	9	8	9	7	4	4	41
61		18ME3011	Advanced metal cutting theory	8	7	8	7	4	4	38
62	Dr. R. Malkiya Rasalin Prince	17ME2020	Design of machine elements	8	8	8	7	4	4	39
63		18ME2004	Machine design	9	9	8	8	4	4	42
64	Dr. Praveen Kumar Bannaravuri	17ME2026	Fluid power control Engineering	8	8	8	8	4	4	40

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF AEROSPACE ENGINEERING

EXTERNAL AUDIT REPORT

Name of the Department	Aerospace Engineering
Name of the School	Engineering and Technology
Name and Address of the External Auditor	Dr. P. Manivannan Professor School of Aeronautical science Hindustan University Padur, Kelambakkam
Auditing Date	12/8/2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. The online auditing method is good.
2. In course file, include the approved syllabus copy.
3. Some faculty member the CO attainment is 100%.

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.
	Name of the Department : Aerospace
	School : School of Engineering and Technology
	Name and Address of the Auditor : Dr. P. Manivannan, Professor, Hindustan University, Chennai.
	Date of Audit : 12.8.2020

S. No	Name of the Faculty	Subject Code	Subject Name	Quality of Teaching Plan and availability of Class Handled Report	Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts	Standard of Quality Assessments given to the students	Attainment of Course Outcomes	Innovative Teaching Practices (write-up provided by faculty)	Report on Online Students Feedback on Teaching from Eduserve (Office Automation)	Total Marks
				10 marks	10 marks	10 marks	10 marks	5 marks	5 marks	50
1	Dr. G. JIMS JOHN WESSLEY	14AE2030	Basics of Aerospace Engineering -	9	9	9	10	3	5	45
2	Dr. RAM KRISHAN SHARMA	17AE2022	Space Dynamics	8	9	8	8	3	4	40
3		19AE1001	Fundamentals of Space Science	9	9	9	8	3	4	42
4	Dr. ALDIN JUSTIN SUNDARARAJ	16AE2004	Cryogenic Propulsion	8	9	8	7	3	4.5	39.5
5		17AE2021	Aircraft Propulsion	9	9	8	7	3	4	34
6	Dr. P. JEYAJOTHIRAJ	14AE2026	Wind Tunnel Techniques	9	9	8	8	3	4	41
7		17AE2016	Gas Dynamics	9	9	8	8	3	4	41
8	Dr. P. PRAVEEN VIJAYA RAJ	14ME2039	Composite Materials	8	7	7	7	2	3	34
9		18AE2007	Thermodynamics	8	7	7	7	2	2	33
10	Dr. S. VENKATACHALAM	17AE2018	Aircraft Structures II	9	8	8	9	3	4	41
11		18AE2005	Strength of Materials	9	8	7	9	3	4	40
12	Ms. S.R. MUSICA	17AE2014	Elements of Avionics	9	6	7	6	2	3.5	33.5
13		18AE2002	Aerospace Materials and Processes	9	6	7	6	2	4	34
14	Mrs. R. GAYATHRI	18AE2003	Basic of Fluid Mechanics	9	8	8	8	3	3.5	39.5
15	Mr. A. DANIEL ANTONY	16AE2006	Introduction to Unmanned Aircraft Systems	8	8	8	9	3	4	40
16		17AE2020	Aircraft Stability and Control	9	8	8	9	3	4	41

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

EXTERNAL AUDIT REPORT

Name of the Department	Electronics and Communication Engineering
Name of the School	Engineering and Technology
Name and Address of the External Auditor	Prof. Lyla B. Das Associate Professor NIT - Calicut
Auditing Date	July 14, 2020
Academic Year	2019-20 Odd Semester

Comments / Suggestions given by External course file Auditor during Auditing:

Comments

1. The course files have been prepared very well ,seemingly based on a common format.
2. All faculty have maintained a good report of their activities and their suggestions for further improvements.
3. Because of the common format, the margin of difference when evaluating them is very small.
4. Further, feedback from students seem to have been collected systematically .
5. There is nothing negative seen in the collection of data and preparation of the course files.
6. Because each course is unique and different from any other course, evaluation may also differ-for example, one course may be highly mathematical while another may be pure theory while another may be application oriented . The evaluation method must take into account the uniqueness of the content.
7. It is good to note that many faculty use video lectures from eminent academicians to improve their courses.
8. In overall, the course files are good and deserve appreciation.

Suggestions

1. Having three internal exams is unnecessary as it puts too much load on the students to focus on theoretical studies to attain marks. Engineering is a practical course, and some time in each semester should be allocated to do practical work for application based courses like Embedded sensor networks, Digital Image Processing, IoT, communication networks etc

2. Question papers should have more of mathematical and application type of questions.
   The question papers seen here focus more on remembering theory .

3. The question paper pattern of choice between two big questions should be changed. There should be short answer type questions to test concepts.

4. Assignments in most courses should be either coding or hardware design as the programme is for Electronics.. Simulation tools are available for many topics and hardware based realization of sensor netwoks, IoT, etc. should be mandatory .

5. Students should be exposed to high level language coding like C, C++, open CV etc.

6. The theoretical course on Matlab is unnecessary .It should be a practical lab course.

7. In the course on Digital Image Processing, it would be advisable to replace/augment Matlab with open CV.

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : Electronics and Communication Engineering									
	School : School of Engineering and Technology									
	Name and Address of the Auditor : Dr. Lyla B. Das, Associate Professor, NIT- Calicut.									
	Date of Audit : 14.7.2020									
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Attainment of Course Outcomes**	**Inno-vative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. D. NIRMAL	14EC2075	Nano Electronics	**9**	**9**	**8**	**9**	**4**	**4**	**43**
2	Dr. G. JOSEMIN BALA	16EC2003	Recent Trends in Wireless Communication	7	7	7	8	3	3.5	35.5
3		18EC3024	Advanced Communication Networks	7	7	7	8	3	3.5	35.5
4	Dr. M. NESASUDHA	14EC3048	EMBEDDED SENSOR NETWORKS	8	6	7	8	3	4	36
5		17EC2012	COMMUNICATION THEORY AND SYSTEMS	8	7	7	9	3	4	38
6	Dr. D. ABRAHAM CHANDY	14EC3071	DIGITAL IMAGE PROCESSING	9	7	9	9	4	4	42
7		17EC2064	Matlab Programming for Engineers	8	8	8	8	4	4	40
8	Mr. A. ALFRED KIRUBARAJ	18EC3027	CMOS VLSI DESIGN	9	9	9	8	4	4	43
9		18EE2002	Network Theory	9	9	8	9	5	4.5	44.5
10	Mr. A. AMIR ANTON JONE	14EC2022	Microwave and Optical Communication	9	8	8	8	3.5	4	40.5
11		18EC2023	Electromagnetic Waves and Waveguides	9	9	8	8	4	4	42
12	Dr. J. ANITA	17EC2041	Principles of Digital Image Processing	9	9	7	7	3.5	4	39.5
13		18EC2001	Electronic Devices	9	9	8	8	4	4	42
14	Dr. G. ANUSHIYA RACHEL	17EC2014	Transmission Lines and Waveguides	9	9	9	8	4	4	43
15		18EC2003	Digital System Design	9	9	9	9	4	4	44
16	Mr. A.S. AUGUSTINE FLETCHER	14EC2069	VLSI Design	9	9	9	9	4	4	44
17		14EC2073	Low Power techniques in VLSI design	9	8	8	9	3.5	4	41.5
18	Mr. CALEB ANDREW H	17MT2037	BROADCAST TECHNOLOGY	9	8	8	8	3.5	4	40.5

19	Mrs. R. CATHERINE JOY	17EC2015	Linear Integrated Circuits.	9	8	8	8	4	4	41
20	Mr. CHRISTHU RAJA	17MT2006	Graphics and Animation	9	8	8	8	4	4	41
21		17MT2032	VR Technologies and Applications	9	8	8	9	4	4	42
22	Ms. DEBIE SHAJI	17MT2020	Studio Acoustics	9	8	7	8	3	4	39
23		17MT2026	DIGITAL MUSIC	9	8	7	8	3	4	39
24	Dr. A. DIANA ANDRUSHIA	18EC2005	Signals & Systems	9	9	9	9	4	4	44
25		18EE2002	Network Theory	9	9	9	9	4	4	44
26	Dr. EMMANUEL JOY	14MT2043	MOTION CAPTURE	9	8	9	9	4	4	43
27	Dr. J. GRACE JENCY GNANAMMAL	14EC2074	VLSI Fabrication Techniques	9	8	8	9	3.5	4	41.5
28		17EC2015	Linear Integrated Circuits	9	9	8	8	3.5	4	41.5
29	Dr. S. IMMANUEL ALEX PANDIAN	18EC2001	Electronic Devices	9	9	9	9	4	4	44
30	Dr. D.J. JAGANNATH	16EC2002	Internet of Things for communication Engg	9	8	7	8	3.5	4	39.5
31		17EC2031	Computer Communication	9	8	8	8	3.5	4	40.5
32	Mrs. D. JASMINE DAVID	14EC2041	High speed networks	9	8	9	9	4	4	43
33		17EC2012	Communication Theory and Systems	9	8	8	8	4	4	41
34	Mr. J. JENKIN WINSTON	14EC2050	Basics of Satellite Communication	9	8	8	9	4	4	42
35		17EC2014	TRANSMISSION LINES & WAVEGUIDES	9	9	9	9	4	4	44
36	Mrs. JENNIFER JUNE	17MT2025	ADVERTISING	9	8	9	9	4	3.5	42.5
37	Mr. J. JOHN PAUL	19EC1001	Fundamentals of Electrical and Electronics Engineering	9	8	9	8	3.5	4	41.5
38	Dr. D. JUDE HEMANTH	14EC2061	Soft Computing	9	9	9	9	4	4	44
39		18MS3014	Research Methodology and IPR	9	8	9	9	4	3	42
40	Mrs. P. MALIN BRUNTHA	14EC2022	Microwave and Optical Communication	9	8	8	8	4	4	41
41		17EI2006	Control Systems	9	8	8	8	4	3	40
42	Mrs. M.A.P. MANIMEKALAI	17EC2015	Linear Integrated Circuits	9	9	9	9	4	4	44
43		19EC1001	Fundamentals of Electrical and Electronics Engineering	9	9	8	8	4	4	42
44	Dr. G. MANOJ	14EC2069	VLSI DESIGN	9	9	9	9	4	4	44
45		18EC3029	Analysis and Design analog Integrated Circuits	9	9	9	9	4	3.5	43.5

46	Dr. K. MARTIN SAGAYAM	14EC2022	Microwave and Optical Communication	9	8	9	9	4	3.5	42.5
47		14EC2042	Routing Algorithms for Wireless mobile networks	9	9	9	8	4	4	43
48	Dr. T. MARY NEEBHA	17EC2014	TRANSMISSION LINES AND WAVEGUIDES	9	9	9	9	4	4	44
49		18EC2023	Electromagnetic Waves & Waveguides	9	8	9	9	3.5	9	47.5
50	Mr. S. MERLIN GILBERT RAJ	14EC2049	Radar Communications	9	9	9	9	4	4	44
51		18EC2023	Electromagnetic Waves and Waveguides	9	8	8	9	3.5	4	41.5
52	Dr. D. NARAIN PONRAJ	14EC2050	Basics of Satellite Communication	9	9	8	9	3.5	4	42.5
53		19EC1003	Basic Principles of Electrical and Electronics Engineering	9	7	7	8	3.5	4	38.5
54	Mrs. S. RADHA	17EI2006	Control Systems	9	9	9	9	4	4	44
55		18EC2005	Signals and Systems	9	9	8	9	4	4	43
56	Dr. D. RAVEENA JUDIE DOLLY	14EC2054	Biomedical Signal Processing	9	8	8	9	4	4	42
57		17EC2012	Communication Theory and Systems	9	8	8	9	3.5	3.5	41
58	Dr. J. ROOPA JAYASINGH	14EC2054	Fault Tolerant Techniques	9	8	8	9	4	4	42
59		17EC2012	Communication Theory and Systems	9	9	8	9	3.5	4	42.5
60	Mr. J. SAMSON IMMANUEL	14EC2069	VLSI Design	9	9	8	9	4	4	43
61		17EC2048	VHDL	8	7	7	8	3	3.5	36.5
62	Mr. SHAJIN PRINCE	17EI2006	Control Systems	9	9	9	9	4	4	44
63		18EC2005	Signals and Systems	9	9	8	8	4	3.5	41.5
64	Dr. SHANTHINI PANDIARAJ	16EC2002	IoT for Communication Engineering	9	8	7	8	3.5	4	39.5
65		18EC2003	Digital System Design	9	9	8	8	4	4	42
66	Mrs. G. SHINE LET	14EC2041	HIGH SPEED NETWORKS	9	8	9	9	4	4	43
67		18EC2005	SIGNALS AND SYSTEMS	9	9	8	8	4	3.5	41.5
68	Dr. A. SHOBHA REKH	14EC2026	ADVANCED MICROPROCESSOR ARCHITECTURE	9	9	8	8	3.5	3.5	41
69		17EC2028	Embedded System Design	9	9	9	8	4	4	43
70	Dr. D.S.	14EC2069	VLSI DESIGN	9	9	8	9	4	4	43

71	SHYLU	18EC3049	SYSTEM ON CHIP DESIGN	9	8	8	9	3.5	4	41.5
72	Dr. N.M. SIVA MANGAI	18EC2003	Digital System Design	9	9	9	9	4	4	44
73		18EC3032	Digital System and ASIC Design	9	9	9	9	4	4	44
74	Dr. S. SRIDEVI SATHYA PRIYA	17EI2006	Control System	9	9	9	9	4	4	44
75		18EC3030	Hardware Description Languages	9	9	9	9	4	4	44
76	Mrs. C. SUGANTHI EVANGELINE	17EC2015	Linear Integrated Circuits	9	9	9	9	4	4	44
77	Dr. D. SUGUMAR	14EC2049	Radar Communication	9	9	9	9	4	4	44
78		14EC2045	SPREAD SPECTRUM SYSTEMS	9	9	9	9	4	4	44
79	Mrs. I. THUSNAVIS BELLA MARY	18EC2001	ELECTRON DEVICES	9	9	8	8	4	4	42
80		18EE2002	NETWORK THEORY	9	9	9	9	4	4	44
81	Mr. H. VICTOR DU JOHN	18EC3028	Solid State Device Modeling and Simulation	9	8	9	9	3.5	4	42.5
82		19EC1001	Fundamentals of Electrical and Electronics Engineering	9	9	8	8	4	4	42
83	Mr. NAIR VISHAL VIJAY	17EC2008	Microprocessor and Microcontroller	9	8	8	8	3.5	4	40.5
84	Dr. TONY JOSE	17EC2014	Transmission Lines and Waveguides	9	9	9	9	4	4	44
85		16EC2003	Recent Trends in Wireless Communication	7	7	7	8	3	3.5	35.5
86	Mr. NAVIN M GEORGE	17MT2035	Animatronics	9	8	8	8	4	4	41
87	Mr. PARVEEN IMMANUEL	19MT2001	Technology of Digital Photography	9	7	8	8	3	4	39

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

EXTERNAL AUDIT REPORT

Name of the Department	Electrical and Electronics Engineering
Name of the School	Engineering and Technology
Name and Address of the External Auditor	Prof. Sanjeeb Mohanty Associate Professor, NIT - Rourkela
Auditing Date	13.07.2020
Academic Year	2019-20 Odd Semester

Comments / Suggestions given by External course file Auditor during Auditing:

1.The number of IA should be toned down from 3 to 2.

2. Each of IA to be 15 marks, QA should be 15 marks, Attendance is 5 marks and End Semester to be 50 marks.

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : Electrical and Electronics Engineering									
	School : Engineering and Technology									
	Name and Address of the Auditor : Prof. Sanjeeb Mohanty, Associate Professor, NIT - Rourkela									
	Date of Audit : 13.7.2020									
S. No	**Name of the Faculty**	**Subject Code**	**Course Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Attain-ment of Course Outcomes**	**Inno-vative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. A. Immanuel Selvakumar	14EE2036	Smart Grid Technologies(V-1.1)	9	9	9	8	4	4	43
2		18EE3019	Distributed Generation and Micro grid	9	9	9	9	4	4	44
3	Dr. J. Jayakumar	14EE2033	Harmonics and Power Quality(V-1.1)	9	8	9	8	3	4	41
4		14EE2036	Smart Grid Technologies(V-1.1)	9	9	8	9	3	4	42
5	Dr. V. Evelyn Brindha	19EC1003	Basic Principles of Electrical and Electronics Engineering	9	9	8	8	4	4	42
6		14EC2029	Embedded System Design	9	9	9	8	4	4	43
7	Dr. V. Jegathesan	17EE2006	Power Electronics	9	9	8	9	3	3	41
8		18EE3001	Energy Engineering	9	9	8	8	3	3	40
9	Dr. Prawin Angel Michael	15EE2005	Testing and Installation of Power System Apparatus	9	8	9	9	4	4	43
10	Dr. M.S.P. Subathra	18EE3002	Photovoltaic Systems	9	9	9	9	4	4	44
11		19EC1003	Basic Principles of Electrical and Electronics Engineering	9	9	8	9	4	4	43
12	Dr. A. Albert Rajan	18EE2003	Analog Electronic Circuits	9	9	8	9	4	3	42
13	Dr. Shanty Chacko	14CS2013	Machine Learning Principles and Applications	9	8	9	9	4	3	42
14		17EC2015	Linear Integrated Circuits	9	9	9	9	4	3	43

15	Dr. F.T. Josh	14EE2024	Basics of Electric and Hybrid Vehicle	9	9	9	9	4	4	44
16		19EC1003	Basic Principles of Electrical and Electronics Engineering	9	8	8	9	4	4	42
17		19EE1001	Basic Electrical and Electronics Engineering	9	8	9	9	4	4	43
18	Dr. S. Paul Sathiyan	14EC2029	Embedded System Design	8	9	9	9	4	4	43
19		18EE3022	Electric & Hybrid Vehicle	9	8	8	8	4	3	40
20	Dr. P. Venkatesh Kumar	18EE2005	Electromagnetic Fields	9	9	8	8	4	3	41
21		18EE1003	Basic Electrical and Electronics Engineering	8	9	8	8	4	3	40
22	Mrs. R. Meenal	18EE2001	Electrical Circuit Analysis	9	8	9	8	4	3	41
23		18EE1003	Basic Electrical and Electronics Engineering	9	9	8	9	4	3	42
24	Mrs. J. Jency Joseph	14EE2012	Electric Drives and Control(V-1.1)	8	9	8	9	4	3	41
25		18AT2010	Fundamentals of Renewable Energy sources(iii agri)	9	8	9	8	4	4	42
26	Mr. C. Benin Pratap	18EE2006	Electrical Machines – I	9	9	9	8	4	3	42
27		19EC1003	Basic Principles of Electrical and Electronics Engineering	9	9	9	9	4	4	44
28	Mr. S. Ajayan	14EI2044	PLC and Automation	9	9	8	9	4	4	43
29	Mr. S. Satheesh Kumar	18EE1003	Basic Electrical and Electronics Engineering	8	8	9	9	4	4	42
30		18EE3003	Energy Management and Audit	8	8	9	8	4	3	40
31	Mr. P. Nagabushanam	17EC2010	Digital Signal Processing	8	9	9	9	4	4	43

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF BIOMEDICAL ENGINEERING AND ROBOTICS ENGINEERING

EXTERNAL AUDIT REPORT

Name of the Department	Biomedical Engineering and Robotics Engineering
Name of the School	Engineering and Technology
Name and Address of the External Auditor	Dr. Elizabeth Rufus Professor, VIT, Vellore.
Auditing Date	10th August 2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. Different target for different courses. Also in a single course different target for different COs.
2. Reasons for not attaining the target. In many courses target is not reached for all COs.
3. Steps to be taken if CO attainment does not reach target..
4. Comments or feedback can be given on the answer sheets.
5. Question paper must be able to check Higher order thinking skills

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : Biomedical Engineering and Robotics Engineering									
	School : Engineering and Technology									
	Name and Address of the Auditor : Dr. Elizabeth Rufus, Professor, VIT, Vellore.									
	Date of Audit : 10.8.2020									
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Attainment of Course Outcomes**	**Innovative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. S. Thomas George	17EC2010	Digital Signal Processing (III EIE/BME)	9	**7**	8	7	3.5	3	37.5
2		18BM3002	Advanced Medical Signal Processing(I BME-PG)	8.5	**7**	8	7	3.5	3	37
3	Dr.Manimegalai	18BM2001	Human Anatomy and Physiology (II BME)	7.5	**6**	8	6	3	3	33.5
4		17BT2052	Biomaterials and Artificial Organs (III BME)	7	**6**	8	6	3	3	33
5	Dr. D.Pamela	17EC2071	Communication Engineering (III EIE)	6.5	**6**	6	6	3	3	30.5
6		18EC2032	Electron Devices and Circuits (II BME/RA)	6.5	**6**	6	7	3	3	31.5
7	Dr. P. Subha Hency	18BM3001	Advanced Medical Instrumentation Design (I BME-PG)	6	**6**	6	6.5	3.5	3	33
8		14EI2017	BioMedical Instrumentation (IV EIE)	6	**6**	6	6.5	3	3	30.5
9	Dr. P. Rajalakshmy	17EI2032	Theory & Design of Neurofuzzy Controllers(IV EIE)	6	**6**	6	6.5	3	3	30.5
10		18BM3012	Cognitive Technology for Biomedical Engineers (I BME-PG)	6	**6**	6	6	3	3	30
11		18EE2001	Electric Circuit Analysis (II UG)	6	**6**	6	6	3	3	30
12	Dr. J. Samson Isaac	18BM3024	Biomedical Engineering Entrepreneurship(II BME-PG) Self Study	6	**6**	6	7	3	3	30
13		15EI2021	Ergonomics in Hospitals - IV BME	6	**6**	6	6	3	3	30

14		17BM2009	Biomechanics Prosthesis and Orthosis (III BME)	6	**6**	6	6	3	3	30
15	Mr. K. Gerard	17EI2008	Industrial Instrumentation (III EIE)	6	**6**	6	6	3	3	30
16		18EI3010	Automotive Embedded Systems- (I ES)	6	**6**	6	6	3	3	30
17		17EI2028	SCADA System Design (IV EIE)	6.5	**6**	6	6.5	3	3	30
18	P Anantha Chrisu Raj	17EI2034	Instrumentation and Control Systems	6.5	**6**	6	6.5	3	3	31
19		17EI2043	Process Control for Food Engineers	7	**6**	6	6.5	3	3	31.5
20	Dr. L. D. Vijay Anand	17EI2009	Process Dynamics and Control (III EIE)	6	**6**	6	6	3	3	30
21		17BM2013	Modelling of Physiological Systems -III BME	6	**6**	6	6	3	3	30
22		17EI2043 s	Process Control for Food Engineer	6	**6**	6	6	3	3	30
23	Dr. X. Anitha Mary	18EC2030	Digital Electronics(II RA)	6	**6**	6	6	3	3	30
24		18EI3020	Advanced Course in Embedded C- I ES	6	**6**	6	6	3	3	30
25		18EI3001	Advanced Embedded Signal Processing-I ES	6	**6**	6	6	3	3	30
26	Hepsiba D.	14EI2024	Power Plant Instrumentation - IV EIE	6	**6**	6	6	3	3	30
27		14EC2061	Soft Computing(IV B. Tech BME)	6	**6**	6	6	3	3	30
28	P Kingston Stanley	17EI2044	Nanoscale Sensors and Transducers (IV EIE)	6.5	**6**	6	6	3.5	3	31
29		18BM2002	Biomedical Sensors and Transducers II BME	6	**6**	6	6	3	3	30

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

EXTERNAL AUDIT REPORT

Name of the Department	Computer Science and Engineering
Name of the School	Engineering and Technology
Name and Address of the External Auditor	Dr. P. Santhi Thilagam, Professor, Department of Computer Science & Engineering, NITK, Surathkal.
Auditing Date	20.08.2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. It is observed that advanced curriculum and syllabus is in practice.
2. It observed that course plans for teaching are well prepared and maintained.
3. It is observed that curricular plans are executed in a planned manner to achieve the course outcomes.
4. It is observed that reliable assessment process is followed through the use of standard evaluation components.
5. There are no details found to ensure that assessments are performed as planned, and action taken on students' feedback to improve the teaching quality as well as course quality.
6. It is to suggest that department can define the key quality indicators of student performance based on the POs.
7. It is to suggest that more add-on courses suggested by NASSCOM, SWYAM, NSF etc. can be included.
8. It is to suggest that department can come up with one new best teaching-learning practice every year

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : Computer Science and Engineering									
	School : School of Engineering and Technology									
	Name and Address of the Auditor : Dr. P. Santhi Thilagam, Professor, NITK - Surathkal.									
	Date of Audit : 20.8.2020									
S. No	**Name of the Faculty**	**Designation**	**Subject Code**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Attain-ment of Course Outcomes**	**Innovative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr.J.Immanuel John Raja	18CS1004	Programming for Problem Solving	10	9	10	10	4	5	**48**
2	Dr.Kumudha Raimond	17CS2008	Database Systems	9	8	8	9	5	5	**44**
3		18CS2013	Machine Learning Techniques	9	8	10	9	4	5	**45**
4	Dr.E.Kirubakaran	18MS2001	Professional Ethics	9	8	9	9	5	4	**44**
5		17CS2008	Database Systems	8	8	9	10	5	4	**44**
6	Dr.Ramakrishna Seemakurti	17CS3066	Software Metrics and Quality Management	9	8	9	9	4	4	**43**
7		14CS2008	Cryptography and Network Security	10	8	10	10	4	5	**47**
8	Dr.E.Grace Mary Kanaga	17CS2008	Database Systems	8	8	8	10	5	5	**44**
9		17CS2048	Management Information Systems	9	9	9	10	4	5	**46**
10	Dr. S.Salaja	17CS2021	Theory of Computation	8	9	10	10	5	4	**46**
11		17CS2041	Intelligent Systems	8	8	10	9	5	5	**45**
12	Dr. J. Dinesh Peter	17CS3046	Interactive Game Design	9	9	9	10	4	5	**46**
13	Dr. G. Jaspher Kathrine	17CS2063	Wireless and VOIP Security	8	9	8	9	4	5	**43**
14		18CS3042	Ethical Hacking	10	9	8	10	4	5	**46**
15		14CS2008	Cryptography and Network Security	10	9	8	9	5	4	**45**
16	Dr.A.Shamila Ebenezer	18EC2003	Digital System Design	8	9	10	9	4	5	**45**
17		18CS2013	Machine Learning Techniques	9	8	10	9	5	4	**45**
18	Dr.P. Getzi Jeba	18EC2003	Digital System Design	9	9	8	9	4	5	**44**
19		17CS2060	TCP/IP	10	8	9	10	5	5	**47**
20	Dr.A.Ketsy Prabavathy	18EC2003	Digital System Design	9	8	8	10	5	4	**44**
21		17CS3060	Requirement Engineering	10	9	8	10	5	4	**46**
22	Dr.S.Durga	17CS2063	Wireless and VOIP Security	10	9	9	10	4	5	**47**
23		14CS2008	Cryptography and Network Security	10	9	9	9	5	5	**47**
24	Dr.K.Ramalakshmi	17CS2008	Database Systems	9	9	10	9	5	5	**47**
25		17BI2010	Linux and R programming	10	9	9	10	4	5	**47**
26		18CS3085	Soft Computing	8	8	10	10	4	5	**45**
27	Dr. R. Venkatesan	18CS2014	Object Oriented Programming	9	9	8	10	4	5	**45**

28		16CS2002	Fundamentals of Java Programming	9	8	10	10	4	5	**46**
29	Dr.G.Naveen Sundar	17CS3049	Knowledge Management	10	9	8	9	4	5	**45**
30		17CS3040	Data Warehouse	10	9	9	10	4	4	**46**
31	Dr. D. Sujitha Juliet	17CS2041	Intelligent Systems	10	9	9	10	5	4	**47**
32		17CS3046	Interactive Game Design	10	8	9	9	4	4	**44**
33	Dr.J.Anitha	18CS2014	Object Oriented Programming	10	9	9	10	5	5	**48**
34		17CS2053	Multimedia Systems and Design	9	8	10	9	4	5	**45**
35	Mr.V.M.Arul Xavier	18CS2014	Object Oriented Programming	9	9	8	9	4	5	**44**
36		17CS2030	Computer Graphics	8	9	9	9	5	5	**45**
37		17CS2024	Web Technology	9	9	8	10	5	5	**46**
38	Dr.M.Rosni Thanka	17CS2024	Web Technology	10	9	10	10	5	4	**48**
39		17CS3077	Internet of Things	9	8	8	9	4	4	**42**
40	Dr. E. Bijolin Edwin	17CS2053	Multimedia Systems and Design	9	8	8	9	4	4	**42**
41		17CS2062	Virtualization	8	9	10	9	5	5	**46**
42	Mrs. Esther Daniel	14CS2008	Cryptography and Network Security	8	7	8	7	4	3	**37**
43		18CS1004	Programming for Problem Solving	10	9	7	8	4	3	**41**
44		18CS3067	Network Security	9	8	8	7	3	4	**39**
45	Dr.M.Mythily	18CS2014	Object Oriented Programming	10	8	9	8	4	3	**42**
46		17CS2033	Design Patterns	10	8	8	9	5	4	**44**
47	Dr.T.Jemima Jebaseeli	17CS2024	Web Technology	10	7	8	7	3	3	**38**
48		17CS2061	Total Quality Management	10	8	7	8	4	4	**41**
49	Mr.Bright Gee Varghese R	14CS2063	Mobile Application development using Andro	7	9	7	7	4	4	**38**
50		17CS2012	Object Oriented programming in C++	7	9	9	7	3	4	**39**
51	Mr.S. Iwin Thanakumar	18EC2003	Digital System Design	8	7	9	7	5	3	**39**
52		16CS2002	Fundamentals of Java Programming	7	9	7	6	5	4	**38**
53		18CS3059	Machine Learning	8	9	7	8	4	3	**39**
54	Dr.V.Karunakaran	17CS3033	Artificial Intelligence for Games	8	7	9	6	5	4	**39**
55		18CS3005	Advance Data Structures	8	9	9	6	5	3	**40**
56		18CS1004	Programming for Problem Solving	10	7	7	8	4	3	**39**
57	Dr.Priyadharsini. C	17CS2037	Fundamentals of Human Computer Interactio	7	9	8	6	3	3	**36**
58		18CS3102	Principles of Cyber Security	10	9	7	6	3	3	**38**
59		14CS2008	Cryptography and Network Security	7	8	9	8	5	4	**41**
60	Ms.I.Deva Priya	17CS2042	Internet Routing Architecture	8	7	7	8	4	3	**37**
61		17CS3047	Internetworking Multimedia	10	8	9	8	3	4	**42**
62	Mrs. S. Jeba Priya	17CS2051	Mobile Computing	9	9	8	7	4	4	**41**
63		17CS2053	Multimedia Systems and Design	9	8	7	8	3	4	**39**

64	Mrs. D. Narmadha	17CS2008	Database Systems	9	8	8	8	3	3	**39**
65		17CS2047	Machine Learning Principles and Application	9	7	8	8	5	4	**41**
66	Mrs. T Mathu	17CS2021	Theory of Computation	7	8	9	8	5	3	**40**
67		17CS3033	Artificial Intelligence for Games	7	8	8	7	3	3	**36**
68	Mrs.J.A.M. Rexie	18CS2006	Data Structures and Algorithms	9	7	9	7	5	3	**40**
69		17CS2021	Theory of Computation	9	8	8	6	4	3	**38**
70	Mr.Sebastian Terence	17CS2024	Web Technology	8	7	7	9	3	4	**38**
71		18CS1004	Programming for Problem Solving	10	8	8	7	5	3	**41**
72	Mrs.S.Akila Agnes	17CS2024	Web Technology	9	9	9	8	3	3	**41**
73		18CS1004	Programming for Problem Solving	7	8	8	8	5	4	**40**
74	Mr.John Livingston S	17CS2032	Database Administration	10	9	8	8	5	3	**43**
75		17CS3041	Database Security	7	8	9	7	3	4	**38**
76	Mr.J.Andrew	18CS3106	Deep Learning	7	8	9	6	5	4	**39**
77		17BI2007	Perl and Python Programming	10	9	8	6	3	3	**39**
78	Mr.Belfin R V	17CS2027	Business Intelligence	9	8	7	8	4	3	**39**
79		17CS2053	Multimedia Systems and Design	7	7	9	6	3	3	**35**
80	Mr. BL RadhaKrishnan	17CS3010	Cloud Computing services	8	8	9	7	4	3	**39**
81		17CS2044	Introduction to System Administration	7	8	9	7	5	3	**39**
82	Mr.S. Basil Xavier	17CS2061	Total Quality Management	10	8	9	8	3	3	**41**
83		17CS2053	Multimedia Systems and Design	10	7	9	6	5	3	**40**
84	Mr.Shibin David	18CS1004	Programming for Problem Solving	7	9	7	6	5	4	**38**
85		17BI2011	Java Programming	9	8	7	7	5	3	**39**
86	Dr.S.Sudhakar	18CS1004	Programming for Problem Solving	8	8	8	7	5	3	**39**
87		17CS2067	Introduction to Data Analytics	7	7	7	8	5	4	**38**
88	Dr.J .Jebaveerasingh	18CS2006	Data Structures and Algorithms	7	7	8	6	3	4	**35**
89		17CS2021	Theory of Computation	7	7	7	8	3	3	**35**
90	Mr. V. Ebenezer	17CS2039	Information security	10	7	8	6	4	3	**38**
91		16CS2002	Fundamentals of Java Programming	10	8	9	7	5	4	**43**
92	Mr. N. Karthik	17CS3029	Wireless Sensor networks	9	9	7	8	3	3	**39**
93		16CS2002	Fundamentals of Java Programming	10	8	8	7	5	3	**41**

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF BIOTECHNOLOGY

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	Biotechnology
Name of the School	Agriculture and Biosciences
Name and Address of the External Auditor	Dr. Arnold Emerson I Associate Professor VIT-Vellore
Auditing Date	13-07-2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. Faculty should be appreciated for their time and effort in preparing the course files and CO attainment calculations.
2. The best CO attainment files should be circulated to all the faculty for their references.
3. Bloom's taxonomy should also be circulated to all the faculty for the preparation of the question papers.
4. The faculty should incorporate more innovative teaching methods other than regular teachings like chalk and talk, videos, and ppts.

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.
	Name of the Department : Biotechnology
	School : Agriculture and Biosciences
	Name and Address of the Auditor : Dr. Arnold Emerson I, Associate Professor, VIT - Vellore.
	Date of Audit : 13-07-2020

S. No	Name of the Faculty	Subject Code	Subject Name	Quality of Teaching Plan and availability of Class Handled Report	Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts	Standard of Quality Assess-ments given to the students	Attain-ment of Course Out-comes	Innovative Teaching Practices (write-up provided by faculty)	Report on Online Students Feedback on Teaching from Eduserve (Office Automation)	Total Marks
				10 marks	10 marks	10 marks	10 marks	5 marks	5 marks	50
1	Dr. JIBU THOMAS	14BT2046	Research Methodology	10	10	9	10	5	4	48
2	Dr. J. JANNET VENNILA	19BT3001	Advanced in Bioploymer and Applications	10	10	10	8	5	4	47
3	Dr. BISWANATH MAHANTY	17BT2027 B-1	Chemical and Bio-thermodynamics	10	9	10	9	5	3	46
4		17BT2027 B-2	Chemical and Bio-thermodynamics	10	9	10	8	5	4	46
5		19BT3017	Metabolic Regulation and Engineering	10	9	10	7	5	4	45
6	Dr. Md. AFROZ ALAM	14BI2027	Chemiinformatics and QSAR	8	9	8	8	5	4	42
7		14BI2012	Molecular Modelling and CADD	8	9	8	9	5	4	43
8		14BI2031	Clinical Database Management	9	9	9	8	5	4	44
9	Dr. M.S.A. MUTHU KUMAR NADAR	14BT2042	Stem Cell Technology	10	10	9	0	5	4	38
10		15BT3023	Plant and Animal Tissue Culture	9	9	9	0	5	3	35
11		17BT2021	Immunology	9	9	9	0	5	4	36
12	Dr. PINAKI DEY	17BT2020	Enzyme Engineering	10	10	9	10	5	4	48
13		18BT2003	Bioprocess Calculations	10	9	10	10	5	5	49
14	Dr. I. REYA ISSAC	17BT2019	Bioreactor Engineering	10	9	10	9	4	5	47
15		17BT2039	Biochemical Engineering	10	10	9	9	4	5	47
16	Dr. V.M. BERLIN GRACE	18BT2002	Basis of Industrial Biotechnology	10	9	10	9	4	5	47
17		18BT3029	Cancer Management Techniques	10	10	9	10	4	5	48
18	Dr. C. VANI	14BT2040	Animal Biotechnology and Cell culture Techniques	10	9	9	10	5	5	48
19		17BT2016	Genetic Engineering and Bioethics	10	9	9	10	5	5	48
20	Dr. D. PREMNATH	14BI2001	Analytical Bioinformatics	10	9	9	10	5	4	47
21		14BI2034	Scientific Writing	10	9	9	10	5	5	48
22		14BT2045	Biopharmaceutical Technology	10	9	10	10	5	4	48
23	Dr. LEVIN ANBU MICHELE GOMEZ	14BT2052	Industrial safety and Hazard Analysis	9	9	9	9	4	4	44
24		17BT2021	Immunology	9	9	9	9	4	4	44
25	Dr. M. LAKSHMI PRABHA	14BT2053	Industrial Effluent Treatment	10	9	10	9	5	5	48
26		17BT2061	Biotechnology and Environment	10	9	10	9	5	5	48
27		18BT2006	Basics of Biochemistry	10	9	10	9	5	5	48

28	Dr. R.S. DAVID PAUL RAJ	14BI2009	Bioethics, IPR and Biosafety	9	10	9	10	4	5	47
29		17BI2013	Bioethics, IPR and Biosafety	9	10	9	10	4	5	47
30	Dr. S. KAVITHA	14BT2056	Entrepreneurship	9	10	9	9	4	4	45
31		15BT3018	Food and Dairy Microbiology	9	9	9	9	5	4	45
32		15BT3019	Soil and Agricultural Microbiology	9	10	10	9	4	4	46
33	Dr. S. MURUGAN	14BT3021	Microbial Pathogenesis	10	9	10	10	4	4	47
34		18BT2008	Microbiology	9	10	9	10	4	4	46
35		19BT3010	Microbial Biotechnology	10	9	9	9	4	4	45
36	Dr. T. JESSE JOEL	14BT2041	Molecular Forensics	10	9	9	10	5	4	47
37		15BI3023	Microbial Genomics	10	9	9	10	5	4	47
38		15BT3024	Microbial Nanotechnology	10	10	9	9	4	4	46
39	Mrs. ANU JACOB	17BT2019	Bioreactor Engineering	9	9	10	9	5	4	46
40		14BT2019-B1	Chemical Reaction Engineering	9	10	9	9	5	4	46
41		14BT2019-B2	Chemical Reaction Engineering	10	9	9	9	5	4	46

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
MHRD Approved & NAAC Accredited
Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF FOOD PROCESSING TECHNOLOGY

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	Food Processing Technology
Name of the School	Agriculture and Biosciences
Name and Address of the External Auditor	Dr. N. Venkatachalapathy, Professor and Head Department of Food Engineering Indian Institute of Food Processing Technology Thanjavur 613 005
Auditing Dates	28.07.2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. Overall performance of the department is very good.
2. The faculties have put sincere efforts in completing the syllabus as per the plan.
3. The faculties have conducted the internal assessment tests in time and evaluated properly.
4. The files are in order except few faculties have not placed the internal assessment answer sheets.
5. In few courses the text books mentioned in the syllabus are not matching with the course.
6. There is no industrial visit in the program which is essential for the students to understand the subject.

29/7/2020

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.
	Name of the Department : Food Processing Technology
	School : Agriculture and Biosciences
	Name and Address of the Auditor : Dr. N. Venkatachalapathy, Professor & Head, Dept. of Food Engineering, IIFPT, Thanjavur.
	Date of Audit : 28.7.2020

S. No	Name of the Faculty	Subject Code	Subject Name	Quality of Teaching Plan and availability of Class Handled Report	Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts	Standard of Quality Assessments given to the students	Attain-ment of Course Outcomes	Inno-vative Teaching Practices (write-up provided by faculty)	Report on Online Students Feedback on Teaching from Eduserve (Office Automation)	Total Marks
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. D. Tiroutchelvame	18FP2003	Fluid Mechanics for Food Engineers	9	8.75	9	8.5	4	4.08	43.33
2		14FP2025	Cereals and Pulses Technology	9	8.5	9	8.5	4	4.08	43.08
3		18FP3001	Mass Transfer and Separation Processes in Food Engineering	9.5	9.5	9	8.5	4	4.16	44.66
4	Mr. Vivek	17FP2036	Storage Engineering	8	8.5	9	9	4	4.18	42.68
5	Dr. M.M. Pragalyaashree	14FP2025	Cereals and Pulses Technology	9	8.5	9	9	4	4.41	43.91
6		17FP2016	Unit Operations in Food Process Engineering – II	9	8.75	8.5	8.5	4	4.39	43.14
7		18FP3006	Advances in Food Process Engineering	9.5	9	9	9	4.5	4.4	45.4
8	Dr. R. EmilinRenitta	18FP2004	Food Microbiology	9	8.5	9	9	4	3.85	43.35
9		18FP3011	Advances in Dairy, Meat and fish processing.	9.5	9	9	8.75	4.5	4.26	45.01
10	Dr. S. Gobikrishnan	17FP2017	Refrigeration, Air conditioning and Cold Storage	9	8.75	9	9	4	4.38	44.13
11		14FP2021	Food Process Equipment Design	9	8.5	9	9	4	4.31	43.81
12		18FP3014	Refrigeration and Cold Storage Engineering	9	8.75	9	8	4	4.35	43.1
13	Mr. Daniel Paul	17FP2018	Mechanical Systems for Food Processing	9	8.5	8.5	8	4	4.36	42.36
14		18FP2001	Principles of Food Process Engineering	8	8.5	9	7	4	4.11	40.61
15		18FP3022	Food Supply Chain Management	9	8.25	9	8.5	4	4.23	42.98
16	Mr. Dayanand Peter	17FP2036	Storage Engineering	8	8.5	9	6.5	4	4.39	40.39
17		14FP2026	Plantation Products and Spices Technology	9	8.25	9	7	4	4.29	41.54
18		14FP2029	Technology of Processing of Meat, Poultry and Fish	9	8.5	9	5	4	4.45	39.95

19	Mr. P. Balamurugan	17FP2017	Refrigeration, Air conditioning and Cold Storage	8	8	9	9	4	4.45	42.45
20		14FP2021	Food Process Equipment Design	9	8.5	9	9	4	3.97	43.47
21		18FP3005	Design of Food Processing Equipments	9	9	9	9.5	4	4.19	44.69
22	Mrs. Sara Janitha Johnson	17FP2018	Mechanical Systems for Food Processing	9	8.5	9	9.5	4.5	4.19	44.69
23		14FP3032	Process Economics and Plant Layout Design	9	8.25	9	9.5	4.5	4.12	44.37
24		18FP2004	Food Microbiology	9	8.5	9	9	4.5	3.75	43.75
25	Ms. Angel Abraham	18FP2001 B-2	Principles of Food Process Engineering	9.5	8.5	9	9	5	3.94	44.94
26		14FP2017	Supply Chain Management	9	8	9.25	8.75	4.5	4.24	43.74
27		14FP2029	Technology of Meat, Poultry and Fish	9.5	8.5	9	8.5	4.5	4.23	44.23
28	Dr. T. V. Ranganathan	14FP2032	Process economicas and Plant Layout Design	8.75	7.25	9.5	5	9	4.21	43.71
29		18FP2002	Food Chemistry	8.5	7	9.5	6.5	9	4.21	44.71

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

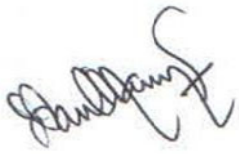
DEPARTMENT OF AGRICULTURE

Name of the Department	Agriculture
Name of the School	Agriculture and Biosciences
Name and Address of the External Auditor	Dr. Paul Mansingh, J. Associate Professor VIT, Vellore
Auditing Date	14.08.2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

I wish to give my comments/suggestions after going through the course files. Over all the quality of teaching plan and assessments are good. The following are the comments/suggestions given by me.

1. Regarding Mid-term
   The existing assessment system with a mid-term examination can be split up into CAT 1 & CAT 2
2. Assignments
   In the assignment part, the students may be given with a problem statement and mentor them to come up with a solution.
3. Answer paper uploads
   The answer sheet uploads are not as per the guidelines (highest (31 to 40 Marks), lowest (11 to 20 Marks) and average (21 to 30 Marks)).
4. Questions
   It is better to have higher order thinking questions in the mid-term and final tests.
5. Innovative Teaching Methods
   Innovative teaching methods may be improved by including project based learning, Jigsaws, QR Codes etc.



Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.								
	Name of the Department : Agriculture								
	School : Agriculture and Biosciences								
	Name and Address of the Auditor : Dr. Paul Mansingh J, Associate Professor, VIT, Vellore								
	Date of Audit : 14.8.2020								
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Innovative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**40**
1	Dr. Kuruvilla Varughese	18AG1001A	Fundamentals of Agronomy	8	8	8	3	4	31
2		18AG1001B	Fundamentals of Agronomy	8	8	8	3	4	31
3	Dr. Jenita Thinakaran	18AG2017	Insects Pests of Vegetables, Ornamentals and Spice crops	8	8	7	3	4	30
4		18AG2023	Pest of crops and stored grains and their management	8	8	7	3	4	30
5	Dr. M. Suguna Devakumari	18AG2015 Horti	Environmental Studies and Disaster Managemnt	8	7	8	3	4	30
6		18AG2015Agri-A	Environmental Studies and Disaster Managemnt	8	7	8	3	4	30
7		18AG2015Agri-B	Environmental Studies and Disaster Managemnt	8	7	8	3	4	30
8		18AG2015Agri-C	Environmental Studies and Disaster Managemnt	8	7	8	3	4	30
9	Dr. Asha Monica	18AT2034A	Farm Machinery and Power	8	8	8	3	4	31
10		18AT2034B	Farm Machinery and Power	8	8	8	3	4	31
11		18AT2034C	Farm Machinery and Power	8	8	8	3	4	31
12	Dr. J. Vimalin Hena	18AG1005 Horti	Agricultural Microbiology	6	7	7	3	4	27
13		18AG1005 A	Agricultural Microbiology	6	7	7	3	4	27
14		18AG1005 B	Agricultural Microbiology	6	7	7	3	4	27
15		18AG1005 C	Agricultural Microbiology	6	7	7	3	4	27
16	Dr. Jacob K. Annamalai	18AT2005	Tractor Systems and controls	8	8	8	3	4	31
17	Dr. K. Indira Petchiammal	18AG2004A	Production Technolog of Vegetables	6	7	6	3	4	26
18		18AG2004B	Production Technolog of Vegetables	6	7	6	3	4	26
19		18AG2019E	Crop Improvement I (Kharif crops)	6	7	6	3	4	26
20		18HO2015	Breeding of Fruits, Spices and Plantation crops	6	7	6	3	4	26
21	Dr. K. Rajendran	18AG2002A	Crop Production Technology -1 Kharif	8	8	8	3	4	31
22		18AG2002B	Crop Production Technology -1 Kharif	8	8	8	3	4	31

23		18AG2002C	Crop Production Technology -1 Kharif	8	8	8	3	4	31
24		18AG2029A	Principles of Organic Farming	8	8	8	3	4	31
25		18AG2029B	Principles of Organic Farming	8	8	8	3	4	31
26		18AG2029C	Principles of Organic Farming	8	8	8	3	4	31
27	Dr. N.B. John Kingsly	18AG2019A	Crop Improvement I (Kharif crops)	8	8	8	3	4	31
28		18AG2019B	Crop Improvement I (Kharif crops)	8	8	8	3	4	31
29		18AG2019C	Crop Improvement I (Kharif crops)	8	8	8	3	4	31
30		18AG2019D	Crop Improvement I (Kharif crops)	8	8	8	3	4	31
31	Dr. N. Jeyapandian	18AG1003 Horti	Introductory agricultural meteorology and climate change	8	8	8	3	4	31
32		18AG1003 A	Introductory agricultural meteorology and climate change	8	8	8	3	4	31
33		18AG1003 B	Introductory agricultural meteorology and climate change	8	8	8	3	4	31
34		18AG1003 C	Introductory agricultural meteorology and climate change	8	8	8	3	4	31
35	Dr. P. Ramesh Kumar	18AG1004 Horti	Fundamentals ofPlant Biochemistry	8	7	8	3	4	30
36		18AG1004 A	Fundamentals ofPlant Biochemistry	8	7	8	3	4	30
37		18AG1004 B	Fundamentals ofPlant Biochemistry	8	7	8	3	4	30
38		18AG1004 C	Fundamentals ofPlant Biochemistry	8	7	8	3	4	30
39	Dr. Patricia	18HO1002	Growth and development of horticultural crops	8	8	8	3	4	31
40		18AG2008	Production technology of medicinal and aromatic plants	8	8	8	3	4	31
41		18HO2008	Production technology of medicinal and aromatic plants	8	8	8	3	4	31
42	Dr. Philip Sridhar	18AG2003	Pest of crops and stored grains and their management	8	7	7	3	4	29
43	Dr. Praveena Katherine	18AG2020A	Manures, Fertilizers and Soil Fertilit Management	8	8	7	3	4	30
44		18AG2020B	Manures, Fertilizers and Soil Fertilit Management	8	8	7	3	4	30
45		18AG2020C	Manures, Fertilizers and Soil Fertilit Management	8	8	7	3	4	30
46		18AG2020D	Manures, Fertilizers and Soil Fertilit Management	8	8	7	3	4	30
47	Dr. R. Vinu Radha	18HO2024	Diseases of fruits, plantation, medicinal and aromatic crops	8	8	7	3	4	30
48		18AG2021A	Diseases of Field and horticultural crops and their management	8	8	7	3	4	30

49		18AG2021B	Diseases of Field and horticultural crops and their management	8	8	7	3	4	30
50		18AG2021C	Diseases of Field and horticultural crops and their management	8	8	7	3	4	30
51	Dr. Samundeswari	18AG2015	Introduction to agriculture and horticulture	8	7	7	3	4	29
52		18AG1009	Fundamentals of crop physiology	8	7	7	3	4	29
53		18AG2004	Production technology of Vegetables	8	7	7	3	4	29
54		18HO2001	Commercial floriculture	8	7	7	3	4	29
55	Dr. Usha Nandhini	18AG2025A	EntrepreunershipDevelopment and Business Management	7	8	7	3	4	29
56		18AG2025C	EntrepreunershipDevelopment and Business Management	7	8	7	3	4	29
57		18AG2003	Agricultural finance and Cooperation	7	8	7	3	4	29
58	Dr. V.P. Dinesh	18AG2038	Precision Farming and Agroinformatics	8	7	7	3	4	29
59	Mrs. S. Sowmeya	18HO1001 Horti	Fundamentals of Horticulture	8	8	8	3	4	31
60		18HO1001A	Fundamentals of Horticulture	8	8	8	3	4	31
61		18HO1001B	Fundamentals of Horticulture	8	8	8	3	4	31
62		18HO1001C	Fundamentals of Horticulture	8	8	8	3	4	31
63	Dr. B. Madhumithra	18AG2022A	Principles of integrated pest and disease management	8	8	8	3	4	31
64		18AG2022B	Principles of integrated pest and disease management	8	8	8	3	4	31
65		18AG2022C	Principles of integrated pest and disease management	8	8	8	3	4	31
66	Dr. V. Kavitha	18AG2003	Agricultural finance and Cooperation	7	8	8	3	4	30
67		18AG2025 Horti	EntrepreunershipDevelopment and Business Management	7	8	8	3	4	30
68		18AG2025D	EntrepreunershipDevelopment and Business Management	7	8	8	3	4	30
69	Dr. K. Natarajan	18AG1002 ABC	Agricultural Heritate	8	6	6	3	4	27
70		18AG1006ABC	Rural Sociology and Educational Psychology	8	6	6	3	4	27
71		18AG2025A	EntrepreunershipDevelopment and Business Management	8	6	6	3	4	27
72		18AT2011A	Extension Methodology and Transfer of Technology	8	6	6	3	4	27
73	Dr. K. Udhayakumar	18AG1001 C	Fundamentals of Agronomy	8	7	7	3	4	29
74		18HO2018	Introduction to major field crops	8	7	7	3	4	29
75		18HO2014	Dyland Horticulture	8	7	7	3	4	29

76	Dr. Palanichamy	18HO2003	Precision farming and protected cultivation	8	7	7	3	4	29
77		18HO2013 B	Principles of ornamental horticulture and landscape architecture	8	7	7	3	4	29
78		18HO2002	Production technology of spices and plantation crops	8	7	7	3	4	29
79	Dr. R. Vijayan - incomplete	18AG 2005 A	Livestock and polutry management	8	7	7	3	4	29
80		18 AG 2005 C	Livestock and polutry management	8	7	7	3	4	29
81		18 AG 2005 D	Livestock and polutry management	8	7	7	3	4	29
82		18AG2005 E	Livestock and polutry management	8	7	7	3	4	29

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT REPORT – Odd Semester 2019-20

DEPARTMENT OF MATHEMATICS

Name of the Department	**Mathematics**
Name of the School	Sciences, Arts, Media and Management
Name and Address of the External Auditor	**Dr. Sunil Jacob John,** Professor of Mathematics and Chairperson UG admissions, NIT, Calicult
Auditing Date	16.7.2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing

1. Quality of Internal Assessment question papers and the quality of evaluation of answer scripts is generally very good
2. Quality Assessment given to the students may be improved by giving a small percentage of challenging questions.
3. Attainment of Course Outcomes is reasonable.
4. More innovative Teaching Practices may be experimented and incorporated that is suitable for situations like covid-19 pandemic.
5. While describing CO's, use of quantifiable verbs are suggested, use Blooms taxonomy
6. Student participation is more encouraged in classes.
7. Encouraged to solve/study at least one real life case study problem in probability and numerical methods
8. Seminars, Mini projects, presentations etc. are encouraged and should be done effectively
9. Student feed backs and Teacher evaluation may be collected for each course.
10. Suggestions for improving course learning level may also be collected from students

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.
	Name of the Department : Mathematics
	School : Sciences, Arts, Media and Management
	Name and Address of the Auditor : Dr. Sunil Jacob John, Professor of Mathematics and Chairperson UG admissions, NIT, Calicult
	Date of Audit : 16-7-2020

S. No	Name of the Faculty	Subject Code	Subject Name	Quality of Teaching Plan and availability of Class Handled Report	Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts	Standard of Quality Assessments given to the students	Attainment of Course Outcomes	Innovative Teaching Practices (write-up provided by faculty)	Report on Online Students Feedback on Teaching from Eduserve (Office Automation)	Total Marks
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50 40**
1	Dr. A. Hepzibah Christinal	17MA2015 Batch 1 (III B.Tech. CSE)	Probability, Random Process and Numerical Methods	10 marks	10 marks	10 marks	9 marks	5 marks	5 marks	49
2		18MA3002 Batch 1 (I M.Tech. CSE)	Mathematical Foundation for Computer Science	10 marks	10 marks	10 marks	9 marks	5 marks	5 marks	49
3	Dr. J. Daphy Louis Lovenia	17MA2012 Batch 1 (III Civil)	Numerical Methods	10 marks	10 marks	10 marks	9 marks	5 marks	5 marks	49
4		18MA2003 Batch 3 (II Mech & Aero)	Partial Differential Equations, Probability and Statistics	10 marks	10 marks	10 marks	9 marks	5 marks	5 marks	49
5	Dr. S. Elizabeth Amudhini	17MA2004 (II B. Tech. Agri)	Laplace Transforms, Fourier Series and Transforms	10 marks	10 marks	10 marks	9 marks	5 marks	5 marks	49
6		19MA1001 (I B. Tech. Mech A)	Calculus and Linear Algebra	10 marks	10 marks	10 marks	9 marks	5 marks	5 marks	49
7	Dr. K. Rebecca Jebaseeli Edna	17MA2015 Batch 2 (III B.Tech. CSE)	Probability, Random Process and Numerical Methods	10 marks	10 marks	10 marks	9 marks	5 marks	5 marks	49
8		17MA2015 Batch 8 (III B.Tech. ECE, EEE)	Probability, Random Process and Numerical Methods	9 marks	10 marks	10 marks	9 marks	5 marks	5 marks	48
9		18MA2001 Batch 2 (I B.Sc. Agri)	Foundations of Mathematics and Statistics	9 marks	10 marks	10 marks		5 marks	5 marks	39/40
10	Dr. V. Jemmy Joyce	17MA2015 Batch 3 (III B.Tech. CSE)	Probability, Random Process and Numerical Methods	9 marks	10 marks	10 marks	9 marks	5 marks	5 marks	48
11		17MA2015 Batch 9 (III B.Tech. ECE, EEE)	Probability, Random Process and Numerical Methods	9 marks	10 marks	10 marks	9 marks	5 marks	5 marks	48
12		18MA2001 Batch 3 (I B.Sc. Agri)	Foundations of Mathematics and Statistics	9 marks	10 marks	10 marks		5 marks	5 marks	39/40
13		19MA3024 Batch 1 (I M.Sc. Maths)	Probability and Distributions	9 marks	10 marks	10 marks		5 marks	5 marks	39/40
14	Dr. G. Gomathi Jawahar	17MA2006 Batch 2 (III Mech & Aero)	Numerical Mathematics and Computing	9 marks	10 marks	10 marks	9 marks	5 marks	5 marks	48
15		18MA2010 Batch 1 (II Bio Tech)	Mathematical and Numerical Methods	9 marks	10 marks	10 marks	9 marks	5 marks	5 marks	48
16		18MA3005 Batch 1 (I M.Tech. Bio Tech)	Foundations of Mathematics and Statistics	9 marks	10 marks	10 marks	9 marks	5 marks	5 marks	48
17		18MA1004 (I CSE A)	Calculus, Matrices and Vector Spaces	9 marks	10 marks	10 marks	9 marks	5 marks	5 marks	48
18	Dr. V.Kavitha	17MA2006 Batch 1 (III Mech & Aero)	Numerical Mathematics and Computing	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47

19		17MA2015 Batch 6 (III B.Tech. ECE, EEE)	Probability, Random Process and Numerical Methods	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
20		18MA2006 Batch 2 (II ECE)	Probability and Stochastic Process	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
21	Dr. B. Elavarasan	17MA2006 Batch 4(III Mech & Aero)	Numerical Mathematics and Computing	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
22		17MA2010 Batch 1 (II BCA)	Discrete Mathematics	9 marks	9marks	10 marks		5 marks	5 marks	38
23		18MA3003 Batch 1 (I M.Tech. Food)	Biostatistics and Quality Control	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
24		19MA3004 Batch 1(I M.Sc. Maths)	Real Analysis	9 marks	9marks	10 marks		5 marks	5 marks	38
25	Dr. R. Selvamani	17MA2015 Batch 4 (III B.Tech. CSE)	Probability, Random Process and Numerical Methods	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
26		18MA3001 Batch 1 (II M.Tech. Mech)	Advanced Mathematical Methods in Engineering	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
27		19MA1001 (I B. Tech. Mech B)	Calculus and Linear Algebra	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
28		19MA3003 Batch 1 (I M.Sc. Maths)	Classical Mechanics	9 marks	9marks	10 marks		5 marks	5 marks	38/40
29	Dr. K. Porselvi	15MA3017 Batch 2 (Free Elective)	Mathematics for Competitive Examinations (Free Elective	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
30		18MA1004 (I CSE D)	Calculus, Matrices and Vector Spaces	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
31		19MA3001 Batch 1 (I M.Sc. Maths)	Modern Algebra	9 marks	9marks	10 marks		5 marks	5 marks	38/40
32	Dr. C. Bazil Wilfred	18MA2004 Batch 1 (II EMT)	Transforms, Integrations and Graph Theory	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
33		18MA1003 (I ECE A)	Calculus and Differential Equations	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
34		18MA2001 Batch 1 (I B.Sc.Agri)	Foundations of Mathematics and Statistics	9 marks	9marks	10 marks		5 marks	5 marks	38/40
35		19MA3017 Batch 1 (I M.Sc. Maths)	Graph Theory and Algorithms	9 marks	9marks	10 marks		5 marks	5 marks	38/40
36	Dr. J. Veninstine Vivik	18MA1003 (I ECE C)	Calculus and Differential Equations	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
37		18MA2004 (II.B.Tech Cvil)	Transforms, Integrations and Graph Theory	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
38		17MA2024(I.B.Com)	Business Mathematics	9 marks	9marks	10 marks		5 marks	5 marks	38/40
39	Mrs. P.S. Divya	17MA1003 Batch 1 (I Nano)	Basic Mathematics for Sciences	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
40		18MA2003 Batch 2 (II Mech & Aero)	Partial Differential Equations, Probability and Statistics	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
41		18MA2006 Batch 3 (II ECE)	Probability and Stochastic Process	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
42	Dr. M. Selva Rathi	17MA2006 Batch 3 (III Mech & Aero)	Numerical Mathematics and Computing	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
43		17MA2014 Batch 1 (II ISDF)	Fuzzy sets and Logic	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
44		18MA2005 Batch 1 (II CSE)	Probability and Statistics	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
45	Dr. J. Catherine Grace	18MA2003 Batch 1 (II Mech & Aero)	Partial Differential Equations, Probability and Statistics	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47

46		18MA2005 Batch 2 (II CSE)	Probability and Statistics	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
47		18MA1003 (I ECE B)	Calculus and Differential Equations	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
48	Mr. P. Xavier	17MA2006 Batch 5 (III Mech & Aero)	Numerical Mathematics and Computing	9 marks	9marks	9 marks	10 marks	5 marks	5 marks	47
49		17MA1005 Batch 1(I ISDF)	Basics Mathematics for Computer Science	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
50		17MA2014 Batch 1 (II ISDF)	Fuzzy sets and Logic	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
51	Mr. S. Jebasingh	17MA2015 Batch 5 (III B.Tech. CSE)	Probability, Random Process and Numerical Methods	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
52		18MA2005 Batch 4 (II CSE)	Probability and Statistics	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
53		19MA1013 (I ECE D)	Multivariable Calculus and Differential Equations	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
54		17MA2005 Lateral Entry	Mathematical Foundations	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
55	Dr. M. Vijila	17MA2015 Batch 7 (III B.Tech. ECE, EEE)	Probability, Random Process and Numerical Methods	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
56		18MA2002 Batch 1 (III B.Sc. Horti)	Design and Analysis of Experiments	9 marks	9marks	9 marks		5 marks	5 marks	37/40
57		18MA2006 Batch 1(II B.Tech ECE)	Probability and Stochastic Process	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
58	Dr. G. Sheeba Merlin	19MA1001 (I Aero)	Calculus and Linear Algebra	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
59		18MA1003 (I EEE)	Calculus and Differential Equations	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
60		18MA2005 Batch 3 (II CSE)	Probability and Statistics	9 marks	9marks	9 marks	9 marks	5 marks	5 marks	46
61	Dr. P. Evanzalin Ebenanjar	18MA2007 Batch 1 (II Food, Bio Med, Robo)	Basics of Probability and Statistics	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
62		18MA1004 (I CSE C)	Calculus, Matrices and Vector Spaces	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
63		18MA1005 (I Food A)	Basics of Calculus and Linear Algebra	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
64		19MA1013 (I Bio Tech B)	Multivariable Calculus and Differential Equations	9 marks	9marks	9 marks	9 marks	5 marks	5 marks	47
65	Dr. H. Jude Immaculate	18MA2007 Batch 2 (II Food, Bio Med, Robo)	Basics of Probability and Statistics	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
66		18MA1004 (I CSE B)	Calculus, Matrices and Vector Spaces	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
67		18MA1005 (I Bio Med, Robo)	Basics of Calculus and Linear Algebra	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
68		19MA1010 (I Bio Tech A)	Matrices and Calculus	9 marks	9marks	9 marks	9 marks	5 marks	5 marks	47
69	Dr. K. Sivaranjani	18MA1004 (I CSE E)	Calculus, Matrices and Vector Spaces	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
70		19MA1002 (I Civil)	Multi Variable calculus and Linear Algebra	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
71		18MA1005 (I Food B)	Basics of Calculus and Linear Algebra	9 marks	9marks	10 marks	9 marks	5 marks	5 marks	47
72		19MA3002 Batch 1 (I M.Sc. Maths)	Ordinary Differential Equations	9 marks	9marks	9 marks		5 marks	5 marks	37/40

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF APPLIED PHYSICS

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	Applied Physics
Name of the School	Sciences, Arts, Media and Management
Name and Address of the External Auditor	Dr. Jayakumar Balakrishnan Assistant Professor, IIT Palakkad
Auditing Date	21/07/2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. The syllabus for most of the courses are standard and similar to what other universities offer. The one important suggestion I would like to give is on the evaluation method adopted. Except for one or two courses, the evaluation method used only tests students power to memorize the theory. Though this is the standard approach most of the universities follow, this is high time that we change this. A question pattern which actually test the student in all areas (Bloom's taxonomy) not in paper but in practice should be followed to the extend possible especially in core courses.

2. Giving students only few grades – like only A and B or O and A should be avoided when there is a clear mark distribution among students. Clubbing students who all got, for e.g. marks between 60 to 90 in A grade does not really reflect the performance of the students and it only gives a false sense of achievement to the students. This should be avoided and may the institute could make a policy or guidelines on these matters.

डॉ. जयकुमार बालकृष्णन
Dr. JAYAKUMAR BALAKRISHNAN
Assistant Professor
IIT Palakkad, Ahalia Integrated Campus
Kozhipara(P.O), Palakkad, Kerala - 678 557
jayakumar@iitpkd.ac.in

jayakumar

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.
	Name of the Departments : Physics and Nano Technology
	School : Sciences, Arts, Media and Management
	Name and Address of the Auditor : Dr. Jayakumar Balakrishnan, Assistant Professor, IIT Palakkad
	Date of Audit : 21.7.2020

S. No	Name of the Faculty	Subject Code	Subject Name	Quality of Teaching Plan and availability of Class Handled Report	Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts	Standard of Quality Assessments given to the students	Attainment of Course Outcomes	Innovative Teaching Practices (write-up provided by faculty)	Report on Online Students Feedback on Teaching from Eduserve (Office Automation)	Total Marks
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr.S.Rajesh	14PH3002	Quantum Mechanics	8	7	7	9	4	5	40
2		17PH3014	Physics of nanomaterials	8	7	7	8	4	5	40
3	Dr. M. Haris	17PH2001	Mechanics and Properties of Matter	7	9	8	8	5	4	41
4		17PH3006	Physical Optics	9	9	9	9	5	5	46
5	Dr. D. Khanna	18PH1009	Applied Physics (Food Process)	9	9	9	9	5	4	45
6		18PH1009	Applied Physics (Biotechnology)	9	9	9	9	5	4	45
7		17PH3011	Nuclear Physics	6	9	9	9	5	4	42
8	Dr. A. Sakunthala	17PH2008	Spectroscopy	8	7	7	9	4	4	39
9		17PH3002	Statistical Mechanics and Thermodynamics	8	7	7	9	4	4	39
10		19PH1003	Engineering Physics	8	7	8	9	4	4	40
11	Dr. M. Senthilkumar	17PH3013	Solid State Physics	9	7	7	9	4	4	40
12		19PH1003	Engineering Physics	8	7	8	9	4	4	40
13	Dr. A. Abiram	19PH1012	Engineering Physics	8	7	8	9	5	5	42
14		17PH3010	Quantum Mechanics	8	7	7	9	4	4	39
15	Dr. R. Jeba Beula	17PH2004	Semiconductor Physics II	9	7	7	9	4	4	40
16		17PH3001	Classical Mechanics	9	8	8	9	4	4	42

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
MHRD Approved & NAAC Accredited
Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF APPLIED CHEMISTRY

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	Applied Chemistry
Name of the School	Sciences, Arts, Media and Management
Name and Address of the External Auditor	Dr. Lisa Sreejith Professor NIT Calicut
Auditing Date	04.08.2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1.Teaching plan need to be at par with the expectations of the course

2. Satisfactory in all courses, but care needed for many of the asseessment factors in all the data sheets provided

3.Repetitions are many, which could be avoided

04/08/2020 Dr. Lisa Sreejith

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : Applied Chemistry									
	School : Sciences, Arts, Media and Management									
	Name and Address of the Auditor : Dr. Lisa Sreejith, Professor, NIT Calicut									
	Date of Audit : 4.8.2020									
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Attain-ment of Course Outcomes**	**Innovative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. C. JOSEPH KENNADY	17CH2003	Atomic Structure, Thermodynamics, Electrochemistry	8	8	8	7	3.5	3	37.5
2	Dr. A. SAMSON NESARAJ	17CH3021	Applied Electrochemistry	7	7	8	7.5	3	3.5	36
3	Dr. K. PARAMESWARI	15CH2003	Chemistry in Everyday Life	8	8	8	7	3.5	4	38.5
4		17CH2006	Surface Chemistry and Chemical Kinetics	7.5	8	8	7	3.5	4	38
5		17CH3002	Chemical Bonding and Nuclear Chemistry	8	8	8	7.5	3.5	3.5	38.5
6	Dr. N. ANANTHI	17CH1001	Instrumental Techniques in Chemistry	6.5	7	8	7.5	4	3.5	36.5
7		18CH2001	Environmental Studies	7.5	7	9	8	4	4	39.5
8		19CH1002	Chemistry for Computer Science and Engineering	7	8	8	7.5	4	4	38.5
9	Dr. B. JEBASINGH	17CH1004	Environmental Studies	7.5	8	9	8	4	4	40.5
10		18CH2001	Environmental Studies	8	8	8	8	4	4.5	40.5
11		19CH1002	Chemistry for Computer Science and Engineering	7	8	8	7.5	4	4	38.5
12	Dr. V. MADHU	17CH3017	Main Group Chemistry	7	7	8	7.5	3.5	3.5	36.5
13		17CH3019	Spectroscopic Methods for Structure Elucidation	7	8	8	8	4	4.5	39.5
14		18CH1001	Environmental Studies	8.5	8	7.5	7	4	4	39
15	Dr. V. VIJAIKANTH	17CH3008	Organometallic, Bioinorganic and Solid State Chemistry	8.5	8.5	8	7	4	4.5	40.5
16		18CH2001	Environmental Studies	8	8	8	7.5	8	4	43.5
17		19CH1002	Chemistry for computer science and engineering	7.5	7	7	7.5	3.5	3.5	36

18	Dr. R. NANDHA KUMAR	16NT3006	Nanosafety and Environmental Issues	8	8	8	8	4	4.5	40.5
		17CH3020	Supramolecular Chemistry and Green Chemistry	8	7	8	8	4	4	39
19		19CH1002	Chemistry For Computer Science And Engineering	8	7.5	7	8	4	4	38.5
20	Dr. DEBASHIS GHOSH	17CH3003	Organic Reaction Mechanism and Steroeochemistry	7	6	6.5	7	4	4	34.5
		19CH1003	Chemistry for Mechanical Engineering	7	8	8	7	4	4	38
21		19CH1006	Chemistry for Civil Engineering	7.5	8	7	7.5	4	4	38
22	Dr. J. PRABHU	14CH3001	Polymer Chemistry	7	7	8	8	4	4.5	38.5
23		17CH3016	Instrumental methods of Chemical Analysis	8	8	8.5	8	4	4	40.5
24		18CH2001	Environmental Studies	6.5	6	8	7	3.5	4	35
25	Dr. RAJENDRA KUMAR	17CH3001	Chemical Kinetics and Photochemistry	7	7	8	7	3.5	3.5	36
26		17CH3007	Chemical Thermodynamics and Electrochemistry	8	8	7	8	4	4	39
27		18CH2001	Environmental Studies	9	8	7	8	4	4.5	40.5
28	Dr. L. EMMANUVEL	14CH2023	Applied Nano Chemistry and Next Generation Materials	8	8	7.5	7.5	4	4	39
29		17CH3009	Synthetic Methodology and Natural Products	7.5	7	6.5	7	4	4	36
30		18CH2001	Environmental Studies	8.5	7.5	7	8	4	3.5	38.5
31	Dr. VINU	19CH1002	Chemistry for Computer Science and Engineering	7.5	7	7.5	7.5	3.5	3.5	36.5
32		19CH1003	Chemistry for Mechanical Engineering	7	8	8	7	4	4	38
33		19CH1004	Chemistry for Aerospace Engineering	7	8	8	7	4	3.5	37.5
34	Dr. A. OBADIAH	17CH2001	Chemical Bonding and Concept of Acids and Bases	7	8	6	7	4	4	36
35		18CH2001	Environmental Studies	8.5	8	7.5	8	4	3.5	39.5
36		19CH3002	Waste to Energy	8	7	7	8.5	4.5	4.5	39.5

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF ENGLISH

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	English
Name of the School	Sciences, Arts, Media and Management
Name and Address of the External Auditor	Dr. John Joseph Kennedy P Professor Christ University.
Auditing Date	18 July 2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

- While preparing Teaching Plan it may be worthwhile to mention the number of hours to be spent on each unit. This will indicate that the faculty, after careful consideration of the importance of topics/ themes, has allotted appropriate/ sufficient number of hours.
- In the plan it is suggested that the faculty mention the total number of hours allotted for that particular course.
- In some cases, reference books are quite old. It is suggested to avoid books published before 2005 as reference texts unless they are seminal and absolutely significant.
- Mention clearly whether books mentioned are prescribed texts or reference books.
- For courses pertaining to English literature the list of reference books is quite scanty.
- While selecting topics to be taught keep in mind their practical relevance to the core subjects they are studying. For example, teaching Phonetic transcription to Nanotechnology students may be reconsidered.
- There should be complete congruity between course objectives and expected course outcomes.
- In most cases the pedagogical tools are limited to lectures, PPTs, and presentations. Innovative use of technology using several freely available applications such as Google classroom and Moodle may be considered. In other words, use of educational technology needs to be enhanced.
- For Postgraduate students of English term papers and MOOC courses may be considered.

- In Research methodology paper instead of testing students in theory in the end semester examination it may be made completely application oriented.

- Question papers must be error free. Proofread carefully to avoid spelling and grammatical errors. Besides confusing students, it reflects poorly of the department.

- It is imperative that a word limit is mentioned for descriptive answers.

- It is observed that in some cases evaluation is erratic, very liberal and as a result there is a huge variation between teachers. To avoid this, it is suggested that the faculty develop rubrics for answers, especially for descriptive types.

- This will also help students to prepare better and write answers knowing fully well on what parameters they will be evaluated.

- Further this system will help the faculty while giving feedback to students.

- While evaluating the answer scripts a few written comments (written legibly) indicating where the student has erred or where they could do better may be a good practice.

- Writing skills / academic writing may be given more attention.

- In general, avoid undue importance to canonical writings and give more importance to contemporary works.

- Wherever there is a small number of students teaching pedagogy through innovative practices could be greatly enhanced.

- For Engineering and science students more emphasis may be given to applied grammar, conversational / functional English and Writing skills.

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : English									
	School : Sciences, Arts, Media and Management									
	Name and Address of the Auditor : Dr. John Joseph Kennedy P, Professor, Christ University, Bangalore.									
	Date of Audit : 18.7.2020									
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Attainment of Course Outcomes**	**Innovative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50 / 40**
1	Dr. J. SUNDARSINGH	17EN3003	Modern Applied Linguistics	6	6	7		3	5	27/40
2		17EN3018	Teaching Methods-Approaches and Techniques	7	5	6		3	3	24/40
3		18EN1001	English	7	6	6	8	2	3	32/50
4	Dr. D. DAVID WILSON	17EN2001	English for Communication	6	6	5		2	4	23/40
5		17EN3014	Research Methodology	6	5	5		2	4	22/40
6		18EN1001	English	7	5	5	7	2	4	33/50
7		18EN2002	Modern Poetry	7	6	5		2	3	22/40
8	Dr. M. POONKODI	17EN3022	Feminism	6	7	6		3	3	25/40
9		18EN1001	English	7	6	6	6	2	3	30/50
10		18EN2001	Communication Skills and Personality Development	7	5	6		2	3	23/40
11		18EN2003	Drama of Romantic and Victorian Age	6	6	5		3	4	24/40
12	Dr. J. DAS	18EN1001	English	6	6	6	6	2	3	29/50
13		18EN2006	Selected Indian English Writers	5	6	7		2	4	24/40
14	Dr. HELEN UNIUS BACKIAVATHY	17EN2010	Life And Literature	5	7	6	0	3	3	24/50
15		17EN3006	English Structure and Phonetics	7	7	7		3	5	29/40
16		17EN3015	English Poetry	6	6	7		2	3	24/40
17		18EN1001	English	7	7	6	7	3	4	34/50
18		18EN2004	Selected Fiction of Modern Age	6	5	6		2	4	23/40
19	Dr. STARS JASMINE	18EN1001	English	7	5	6	5	2	3	28/50
20		16EN2003	General English	6	5	6		3	3	23/40
21		17EN3002	Shakespeare	7	6	6		3	4	26/40
22		19EN1001	English	6	6	7	7	2	4	32/50
23	Dr. ANITA VIRGIN	17EN2015	Professional English I	6	6	6		2	4	24/40
24		17EN3001	British Literature	5	7	6		3	4	25/40

25		17EN3005	Indian Writing in English	6	6	5		3	4	24/40
26		18EN2001 Agri	Communication Skills and Personality Development	6	6	6		3	4	25/40
27		18EN2001 Horti	Communication Skills and Personality Development	6	6	6		3	4	25/40

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF NANOSCIENCE

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	Nanoscience
Name of the School	Sciences, Arts, Media and Management
Name and Address of the External Auditor	Dr. Jayakumar Balakrishnan Assistant Professor, IIT Palakkad
Auditing Date	21/07/2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. The syllabus for most of the courses are standard and similar to what other universities offer. The one important suggestion I would like to give is on the evaluation method adopted. Except for one or two courses, the evaluation method used only tests students power to memorize the theory. Though this is the standard approach most of the universities follow, this is high time that we change this. A question pattern which actually test the student in all areas (Bloom's taxonomy) not in paper but in practice should be followed to the extend possible especially in core courses.

2. Though this is a M.Sc. Nanoscience course and students may be coming from different background (different bachelor degree program and not necessarily from B.Sc Physics), some of the courses have contents (as given in the excel) topics that are +1/+2 level and could be avoided and more emphasis be given to relevant new topics.

डॉ. जयकुमार बालकृष्णन
Dr. JAYAKUMAR BALAKRISHNAN
Assistant Professor
IIT Palakkad, Ahalia Integrated Campus
Kozhipara(P.O), Palakkad, Kerala - 678 557
jayakumar@iitpkd.ac.in

jayakumar

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.
	Name of the Departments : Physics and Nano Technology
	School : Sciences, Arts, Media and Management
	Name and Address of the Auditor : Dr. Jayakumar Balakrishnan, Assistant Professor, IIT Palakkad
	Date of Audit : 21.7.2020

S. No	Name of the Faculty	Subject Code	Subject Name	Quality of Teaching Plan and availability of Class Handled Report	Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts	Standard of Quality Assessments given to the students	Attainment of Course Outcomes	Innovative Teaching Practices (write-up provided by faculty)	Report on Online Students Feedback on Teaching from Eduserve (Office Automation)	Total Marks
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. I. V. Muthu Vijayan Enoch	16NT3009	Nanotechnology for Cancer treatment and Diagnosis	9	8	8	9	3	5	42
2		16NT3004	Magnetic nano materials and nanofluids	9	7	7	9	3	4	39
3	Dr. B. Vidhya	16NT3011	Photovoltaics: Advanced Materials and Devices	9	8	8	9	4	4	42
4		19PH1011	Optics Properties of Matter	9	9	9	9	4	4	44
5		17NT2004	Materials Science I	9	9	9	9	4	4	44
6	Dr. S. K. Suresh Babu	16NT3013	Nanoscale transistors	8	7	7	9	4	4	39
7		16NT3008	Mems and Nems	9	8	8	9	4	4	42
8		17NT3002	Nanoelectronics	8	7	7	9	4	4	39
9	Ms. Aleyamma Alexander	17NT2001	Introductory Nanotechnology	9	8	8	9	3	4	41

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF MANAGEMENT STUDIES

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	Management Studies
Name of the School	Sciences, Arts, Media and Management
Name and Address of the External Auditor	Dr. Sheena Associate Professor School of Management NITK, Surathkal
Auditing Date	25-07-2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. Suggested to conduct active industry – institute interactions in understanding real-life projects and case studies. (may include credits for the courses on projects). This may eventually result in a conclave where the live projects/academic projects may be evaluated with a closed Viva-Voce.
2. Recommended to have "Entrepreneurship" as a focal subject of the department. Hence, a reframing of the courses in the curriculum to include courses of importance in the current scenario is suggested.
3. Suggested to give practical soft skills/Personality development training to students
4. Recommended to include the subscriptions for cases and caselets from HBR, Ivey B-Schools and so on.
5. Suggested to include practical components by the use of analytical softwares for courses viz; Marketing Analytics, HR Analytics, Accounting for Managers and so on.
6. Highly recommended to use Case Simulations for study of management courses.

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.									
	Name of the Department : Management Studies									
	School : Sciences, Arts, Media and Management									
	Name and Address of the Auditor : Dr. Sheena, Associate Professor, School of Management, NITK, Surathkal									
	Date of Audit : 25.7.2020									
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assess-ments given to the students**	**Attain-ment of Course Outcomes**	**Innovative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**50**
1	Dr. Samuel Joseph	18MS3015	Strategic Cost Management	8.5	7.5	7.5	8	4	4	39.5
2	Dr. Clement Sudhahar	18MS3027	Product and Brand Strategies	8	8	7.5	8.5	4	4	40
3		19MS3002	Marketing Management - Sec A	7.5	8	7	8	3.5	4	38
4	Mrs. Praising Linijah	18MS3028	Digital and Social Media Marketing	8	8	7.5	8	3.5	4	39
5		18MS3065	Manpower Planning Recruitment and Selection	8.5	8	8	8	3.5	4	40
6		19MS3002	Marketing Management - Sec B	8	7.5	7.5	8	3.5	3.5	38
7	Dr. Amudha	18MS3013	Security Analysis and Portfolio Management	8.5	7	7	7.5	4	4	38
8		18MS3022	Wealth Management	8.5	7.5	8	8	4	4	40
9		19MS3003	Accounting for Managers	9	8	7.5	8	3.5	4.5	40.5
10	Dr. Thiru Arooran	18MS2014	Constitution of India	8	7	7	7.5	3	4	36.5
11		18MS3014	Managing Banks and Financial Institutions	8.5	8	8	9	4	4.5	42
12		19MS3001	Organizational Behaviour and Management	8	8	8	8	3.5	4	39.5
13		19MS3005 A	Legal Aspects of Business	8	9	8	8.5	4	4.5	42
14		19MS3005 B	Legal Aspects of Business	8	9	8	8.5	4	4.5	42
15	Dr. Peter Kumar	18MS3016	Income and Corporate Taxation	9	9	9	8.5	4	4	43.5
16		19MS3003	Accounting for Managers	8	8.5	8.5	8	3.5	4	40.5
17	Dr. Amuthan	18MS2012	Engineering Economics	8	7.5	8	8	3.5	3.5	38.5

18		18MS3017	Financial Derivatives	8	8.5	8	8	4	4	40.5
19		18MS2014	Constitution of India	7.5	7.5	7.5	8	3.5	3.5	37.5
20	Dr. Kalpana	18MS3029	Sales and Distribution Management	7.5	7.5	7.5	8	7.5	4.5	42.5
21		18MS3056	Compensation Management	7	7.5	7.5	8	7.5	4	41.5
22		19MS3006 A	Economics for Managers	8	8	7.5	8.5	8	4.5	44.5
23		19MS3006 B	Economics for Managers	8	8	7.5	8.5	8	4.5	44.5
24	Dr. A.G. Sudha	18MS2001	Professional Ethics	8	8	8	8	8	3.5	43.5
25		18MS2014 Bio	Constitution of India	8	7.5	7	8	7	3.5	41
26		18MS2014 EMT	Constitution of India	8	7.5	7	8.5	7	3.5	41.5
27		18MS2014 CSE	Constitution of India	8	7.5	7	8	7	3.5	41
28		18MS2014 ECE	Constitution of India	8	7.5	7	8.5	7	3.5	41.5
29		18MS3059	Negotiations Management	8.5	8	8	8.5	7.5	4.5	45
30	Dr. Anthony Raj	18MS3032	Retail Marketing	8	7.5	7.5	8	7.5	4.5	43
31		18MS3036	International Marketing Strategies	8.5	7.5	8	8	8	4.5	44.5
32		18MS3058	Managing Employee Performance	8	8	7.5	8	7.5	4.5	43.5
33	Dr. Senith	18MS3037	Marketing Analytics	8.5	7.5	7.5	8	7.5	4.5	43.5
34		18MS3066	Fundamentals of Analytics for HRM	8	8	8	8	8	4	44
35		19MS3004A	Quantitative Techniques for Management	8	8.5	8	8	7	4.5	44
36		19MS3004B	Quantitative Techniques for Management	8	8.5	8	7.5	7	4.5	43.5
37	Mr. Jerrin Issac	18MS2001	Professional Ethics	8	8	8	8	7.5	4	43.5
38		18MS2014 CSE	Constitution of India	8	7.5	7	8.5	7	3.5	41.5
39		18MS2014 Mech	Constitution of India	8	7.5	7	8.5	7	3.5	41.5
40		18MS3063	Training and Development	8	7.5	8	8	7.5	4	43
41	Mr. Lawrence	18MS2014 D	Constitution of India	8	7	7	8	7	3.5	40.5
42		18MS2014 C	Constitution of India	8	7	7	8	7	3.5	40.5
43		19MS3001	Organisational Behaviour and Management	8	8	8	7.5	3.5	3.5	38.5

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF COMMERCE AND INTERNATIONAL TRADE

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	Commerce and International Trade
Name of the School	Sciences, Arts, Media and Management
Name and Address of the External Auditor	Dr. Dunstan Rajkumar Associate Professor (Sr) Department of Commerce VIT, Vellore
Auditing Date	8.08.2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing:

1. Course outcome are many but not used in questions or assessment. Course outcomes of some courses must be fine-tuned
2. Blooms taxonomy metrics are not properly matched with the wordings of questions. Training Programmes can be conducted to understand the metrics of LOT and HOT questions more effectively.
3. Scanned Answer Sheets for some faculty members are not clear. Grammatical Errors and Typo Errors can be avoided.
4. Out of 11 metrics given in the Quality Assessments 2 to 3 are alone given significance among most of the faculty members. Metrics such as Assignments, Presentation and Multiple Choice Questions alone have been used. Faculty members may be motivated to use other metrics also.
5. Fast learners may be motivated to help slow learners to reduce the failure. Only one faculty Prof.Peter Kumar has made use of.
6. Innovation and Best Practices should be strengthened, technology, online courses, social media can better be adopted. Newspapers (such as Economic Times, Financial Express) reading should be inculcated to enhance the updates.
7. Guest Lecture/Industry Expert Lecture should be conducted on contemporaries in the relevant subjects.

A. Dunstan Rajkumar

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.
	Name of the Department : Commerce and International Trade
	School : Sciences, Arts, Media and Management
	Name and Address of the Auditor : Dr. Dunstan Rajkumar, Associate Professor (Sr), Department of Commerce, VIT, Vellore
	Date of Audit : 8.08.2020

S. No	Name of the Faculty	Subject Code	Subject Name	Quality of Teaching Plan and availability of Class Handled Report	Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts	Standard of Quality Assessments given to the students	Innovative Teaching Practices (write-up provided by faculty)	Report on Online Students Feedback on Teaching from Eduserve (Office Automation)	Total Marks
				10 marks	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**40**
1	Dr. C. Samuel Joseph	17BC2018	Financial Statement Analysis	8	8	8	4	4	32
2	Dr. D. Mahila Vasanthi Thangam	17BB2011	Research Methodology	8	8	8	4	4	32
3		17BC2013	Corporate Accounting I	8	8	8	5	4	33
4		18PA2001	Financial Accounting -I	8	8	8	5	4	33
5		18PA2005	Management Accounting	8	8	8	5	4	33
6	Dr. Peter	17BB2010	Direct Taxation	10	10	10	4	4	38
7		17BC2020	Income Tax Law and Practice	10	10	10	4	4	38
8	Dr. Aruna	17BB2015	Organizational Behavior	8	7	7	4	3	29
9		17BB2019	Investment Management	8	7	6	4	3	28
10		17BC2015	Banking Theory	8	7	6	4	3	28
11		17BC2021	Business Research Methods	8	7	5	4	4	28
12	Dr. Helina	17BB2013	Cost Accounting	9	8	8	3	3	31
13		17BC2003	Principles of Micro Economics	8	8	8	3	3	30
14		17BC2019	Cost Accounting	8	8	8	3	3	30
15		18PA2004	Corporate Laws	8	8	8	4	3	31
16	Dr. V. Palanishingh	17BB2018	Principles of Insurance	7	7	7	2	2	25
17		17BB2026	Constitution of India	7	7	7	2	2	25
18		17BC2023	Principles of Auditing	7	7	7	2	2	25
19		18PA2014	Corporate Accounting	8	8	8	2	2	26
20	Mr. Leo	17BB2007	Business Law	6	6	6	0	2	20
21		17BB2020	Project Management	6	6	6	0	2	20
22		18PA2013	Strategic Business Reporting	6	6	6	0	2	20
23		18PA2015	Indirect Tax	7	7	6	0	2	22

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
MHRD Approved & NAAC Accredited
Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.

INTERNAL QUALITY ASSURANCE CELL

EXTERNAL COURSE FILE AUDIT – Odd Semester 2019-20

DEPARTMENT OF DIGITAL SCIENCES

EXTERNAL COURSE FILE AUDIT REPORT

Name of the Department	Digital Sciences
Name of the School	Sciences, Arts, Media and Management
Name and Address of the External Auditor	Dr. Jaidhar C.D. Associate Professor Department of Information Technology NITK Suratkal
Auditing Date	18th July 2020
Academic Year	2019-20 Odd Semester

Comments/ Suggestions given by External course file Auditor during Auditing

1. It is observed that for some text books/reference books details mentioned in the course plan are incomplete. Suggested to inform all the course instructor/faculy to write complete details such as Author(s) Name(s), Title of the book, Edition of the book, Publisher Name.
2. If Bloom's Taxonomy adopted to measure the Course Outcome then mention level (L1/ L2/L3/L4/L5/L6) with the Course Outcome. For example, CO(L1).
3. Suggested not to ask one-mark question(s) for UG/PG level courses.
4. Include "**Total Marks in Words**" option in front sheet of the Internal Test Answer Booklet. Further, amend "*Signature of the Examiner*" as "*Signature of the Examiner with Date*".
5. Not to give a single question of 15/20 Marks. Reason is that, if a student is unable to attend such type of question(s), student will be under loss.
6. Most of the questions are Theory-oriented. Thus, suggested to include theory as well as , analytical questions (if applicable).
7. Suggested use common Course Plant Format.
8. Show individual components of the Faculty Feedback Form and also generate Faculty Feedback Form individually for each course/subject.
9. To provide practical exposure to students, suggest to convert technical courses which are of the 3-0-0 form into 3-0-2 courses,

18/07/20

Signature of the External Auditor

	Karunya Institute of Technology and Sciences, Karunya Nagar, Coimbatore 641 114.								
	Name of the Department : Digital Sciences								
	School : Engineering and Technology								
	Name and Address of the Auditor : Dr. Jaidhar C.D., Associate Professor, Department of Information Technology, NITK - Suratkal								
	Date of Audit : 18.7.2020								
S. No	**Name of the Faculty**	**Subject Code**	**Subject Name**	**Quality of Teaching Plan and availability of Class Handled Report**	**Quality of IA1, IA2 & IA3 Question papers and the quality of evaluation of answer scripts**	**Standard of Quality Assessments given to the students**	**Innovative Teaching Practices (write-up provided by faculty)**	**Report on Online Students Feedback on Teaching from Eduserve (Office Automation)**	**Total Marks**
				10 marks	**10 marks**	**10 marks**	**5 marks**	**5 marks**	**40**
1	Dr. C. Beulah Christalin Latha	18CS1001	Information and Communication Technology	7	7.5	7.5	4	4	30
2		18CS2001C	Basics of Computer Programming	7	7.5	7.5	4	4	30
3		18CS2001D	Basics of Computer Programming	7	7.5	7.5	4	4	30
4		19MS3007	Business Analytics	7	7.5	7.5	4	4	30
5	Dr. Carolin Jeeva	17CA2019	Programming in Python	7.5	7.5	7.5	4	3.5	30
6		18CS1001A	Basics of Computer Programming	7.5	7.5	7.5	4	3.5	30
7		18CS2001B	Basics of Computer Programming	7.5	7.5	7.5	4	3.5	30
8	Mr. A.A. Raj	17CA2069	Security Threat Management	8	7.5	7	4.5	4	31
9	Ms. Apoorva	17CS3006	Digital Forensics	7	7	7	4.5	4	29.5
10	Dr. Sathya Srinivas	17CA2045	Operating System and its Security	7	7	7			21
11		17CA2050	Security of Web Application	7	7	7			21
12		17CA3002	Cyber Crimes and Frauds	7	7	7			21
13	Ms. Iyal Pari	17CA3008	Information Technology (IT) Act	7.5	7	7	4	4	29.5
14	Mr. Jeremiah Justus	17CA2053	Fundamentals of General Forensic Science	7.5	7.5	7	4	4.25	30.25
15	Ms. Latha	17CA3001	Cyber Criminology and Criminal Justice Administration	7.5	7.5	7	4	4	30
16	Mr. Madhanraj	17CA2025	Network Components and Troubleshooting	7	7.5	7	4	4.25	29.75
17		17CA3003	Fundamentals of Network Security	5	5	5	4	4	23
18	Mr. Prashant	17CA3005	Information Security	7	7	7	4	4	29
19	Ms. Revathy	17CA2047	Forms of Cyber Crimes and Frauds	7	7	7	4	4.25	29.25
20		17CA2051	Malware Analysis and Security	6.5	7	7	4	4	28.5
21		17CA2065	Advanced Computer Forensics	7	7	7	4	4.5	29.5
22	Mr. Saravanan	17CA2068	Cloud Security	7	7	7	4	4.5	29.5
23	Mr. Suresh	17CA2063	Mobile Computing	7	6.5	7	4	4.5	29

24	Mr. Venkataraman	17CA2049	Fundamentals of Information Security	7	6.5	7	4	4	28.5
25		17CA2062	Information Security Management System Standards	7	6.5	7	4	4.5	29
26		17CA2067	Cyber Security Governance	7	6.5	7	4	4.5	29
27	Mr. Macklin Abraham Navamani	17CA2006	Database Management Systems	7	6.5	7	4	4	28.5
28		17CA2025	Network Components and Troubleshooting	6.5	6.5	7	4	4	28
29		19MS3007	Business Analytics	6.5	6.5	7	4	4	28
30	Dr. Emmanuel Joy	14VC3011	Authoring and Virtual Reality	7.5	6	7.5		4.5	25.5
31		15VC3005	Semiotics and Rhetorics	7.5	6	7.5		4	25
32	Dr. Mallika Vijaya Kumar	17MC2002	Media Law and Ethics	6.5	6.5	6.5	4	4	27.5
33		17MC2004	Media Culture and Communications	6.5	6.5	6.5	4	4	27.5
34	Mr. Caleb	14VC3014	Advanced Animation	6.5	7	7	4	4	28.5
35		17MC2013	2D Animation	6.5	7	7	4	4	28.5
36	Mr. Praveen Immanuel Parulraj	14VC3010	Event and Media Management	6.5	6.5	7	4	4	28
37		17MC2009	Photography	6.5	6.5	7	4	4	28
38	Ms. J.B.Anna Asheervadham Mary	14VC3003	Marketing Management	6.5	6.5	7	4	3.5	27.5
39		15VC3004	Media Phychology	6.5	6.5	7	4	3.5	27.5
40	Ms. Jennifer June	17MC2011	Basics of Multimedia	6.5	6.5	7	4	4	28
41	Ms. Nisha Malini	17CR2003	Indian Criminal Justice Administration	6.5	6.5	7	4	4.75	28.75
42		17CR2010	Basics of Indian Constitution and Offenders Rights	5	6.5	7	4	4.75	27.25
43		17CR2023	Human Rights and Criminal Justice Administration	6.5	6.5	7	4	4.75	28.75
44		17CR2034	Special Laws	6.5	6.5	7	4	4.75	28.75
45	Dr. Ponmary Pushpa Latha	17CA2006	Database Management Systems	6.5	6.5	7	3.75	3.5	27.25
46		17CA2024	Network Security	6.5	6.5	7	3.75	3.5	27.25
47		17CS1001	Fundamentals of Computing and Programming	6.5	6.5	7	3.75	3.5	27.25
48	Ms. Shalini	17CA2008	Operating System Concepts	6.5	6.5	7	3.75	3.75	27.5
49		17CA2026	Professional Ethics	6.5	6.5	7	3.75	3.75	27.5
50	Dr. Surenda Bhavathy	17CR2001	Introduction to Criminology and Criminad administration	5	6.5	7	3.75	4.25	26.5
51		17CR2012	Police Administration	5	6.5	7	3.75	4.25	26.5
52		17CR2014	Penology and correctional Administration	5	6.5	7	3.75		22.25
53		17CR2021	Private Detective and Investigation	5	6.5	7	3.75	4.25	26.5
54	Dr. Ranjith Jeba Thangaiah	17CA2003	Computer Organization and Architecture	6.5	6.5	7	3.75	4	27.75

55		17CA2004	Programming in C	6.5	6.5	7	3.75	4	27.75
56	Dr. Sowmya Kumar	17CR2002	Psychology and Criminal behaviour	5	6.5	7	3.75	4	26.25
57		17CR2011	Forensic Science in Crime Investigation	5	6.5	7	3.75	4	26.25
58		17CR2013	Research Methodology and Statistics in Criminology and Police Administration	5	6.5	7	3.75	4	26.25
59		17CR2022	Fire and Industrial safety	5	6.5	7	3.75	4	26.25

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
MHRD Approved & NAAC Accredited
Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.

Action Taken Report

on the

External Course File Audit Reports

of the Departments of KITS

(Odd Semester 2019-20)

INDEX

S. No.	Department	Page No.
1.	Civil Engineering	1
2.	Mechanical Engineering	2-4
3.	Aerospace Engineering	5
4.	Electronics and Communication Engineering	6-7
5.	Electrical and Electronics Engineering	8
6.	Biomedical Engineering & Robotics and Automation Engg	9
7.	Computer Science and Engineering	10-11
8.	Biotechnology	12-13
9.	Food Processing Technology	14
10.	Agriculture and Horticulture	15
11.	Mathematics	16
12.	Applied Physics	17-18
13.	Nanoscience	19
14.	Applied Chemistry	20
15.	English	21-23
16.	Management Studies	24-25
17.	Commerce and International Trade	26
18.	Digital Sciences	27-28

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Civil Engineering**

S. No.	Comments from External Expert	Action Taken
1.	CO relevant to the question to be entered in the answer script	Concerned Faculty members were directed to make the entry properly in the answer scripts.
2.	Attainment of CO is far less than the target and adequatemeasures to be taken in this regard	1. Faculty members were suggested to take action to improve the attainment of COs after every assessments. 2. It was directed that if more number of COs are covered in each IA parameter then the attainment will improve.
3.	Additional actions to be taken for improvement of COattainment	1. Faculty members were guided to take necessary action after every assessments. 2. It was also requested to propose revision of COs if required.
4.	CO targets are low.Innovative teaching practices inadequate	1. Faculty members were advised to adopt more innovative teaching methods to improve the teaching learning process. 2. The accreditation committee was directed to observe the attainment of COs and the concerning POs to suggest improvements
5.	Report of lectures taken,Feedback report are missing	Faculty members were advised to take utmost care while submitting the reports.

HoD **Dean**

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
MHRD Approved & NAAC Accredited
Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: .....**Mechanical Engineering** .....

Sl. No.	Comments from External Expert	Action Taken
1.	Overall the course files format and the way it is maintained is well appreciated.	
2.	.Quality assessment component needs improvement. Its monotonous and no variety at all. All have done only assignment types and few on MCQs. No proof attached for the list of models and mini projects as claimed by certain few faculty members. There are no initiatives taken for patent application and registration even though all of the staff have it as a PSO.	The faculty members are instructed to keep the proof of mini project and patents in the course file during the Odd semester 2020-21
3.	Some faculty have not understood the concept of course outcome. So, they have dealt with only lower level components of learning like "remember" and "understand".	The faculty members are instructed to strictly follow all the six levels of blooms taxonomy while evaluating the COs
4.	The column on 'Date on which the topic taught' as well can be removed because no one has recorded and it remains empty.	As per the suggestion the date on the topic taught column in Lesson Plan may be removed
5.	Dr.H. Sharon in Refrigeration and Air conditioning, has completed 18 (Lectures 49 -59) topics on a single day (12-11-2019) in two hours. Page 10 & 11 of the course file. May be copy and pasted. Care not taken. Staff have done copy and paste.	The faculty resigned and left the institution.
6.	Subject code : 18ME3011 for the paper Reg No: PRK19ME5001 for	After the student verification two marks have been awarded extra, by mistake it is not inside the paper.

	question number 2 the marks awarded are 12 but total given as 14. Total mistakes. So, some method for a cross check on total marks is a must so that students are not affected. Only three papers are taken as sample out of around 60 and even the papers kept for audit should have been at least verified for addition before submission. This is only a sample.	This won't be repeated in the future.
7.	Mostly it is understood that the target is fixed after the marks are awarded so that it matches with the marks and the whole purpose of continual improvement concept is lost. One sample: Mr. George Samuel Raj, Subject Code: 7ME2018 Thermal Engineering II has fixed target as 70 & 80 for other COs and 50 for CO4. Why this gross variation in fixing the target? This is a proof that targets are fixed after the process of evaluation and there is no motivation for the staff for continual improvement.	The faculty resigned and left the institution.
8.	It is disappointing that no industrial visits are arranged or mentioned as an as part of learning. Students may not have the exposure on the real time problems and challenges. What is claimed as an innovative practice (assignments) is a very common practice and doesn't involve any innovation.11 options are given under the heading, **"Details about quality assessment"** and Deans can insist and instruct the staff to follow at least a few of them instead of all of them choosing only the assignment.	Last semester three industrial visits to the following industries have been arranged. 1. M/s ACE Tech, Coimbatore 2. M/s Trident Pneumatics, PVT LTD, Coimbatore 3. M/s GTN Industries, Palladam

9.	Arranging for at least one guest lecture class and also a guest lecture by foreign Professor would be a good practice and would encourage students and staff leading to some collaborative work	As per the suggestion it is planned to have the guest lecture by industrial experts during the Odd semester of 2020-21

HoD

Dean

ACTION TAKEN REPORT ON THE COMMENTSGIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Aerospace Engineering**

S. No.	Comments from External Expert	Action Taken
1.	The online auditing method is good	Thank you for the encouraging words. Appreciation conveyed to faculty
2.	In course file, include the approved syllabus copy	Noted. Necessary instruction will be givento thefaculty to include the same.
3.	Some faculty member the CO attainment is 100%.	Noted. Relevant awareness will be createdto the faculty.

HoD/Aerospace Engineering

Dean-E&T

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **ELECTRONICS AND COMMUNICATION ENGINEERING**

S. No.	Comments from External Expert	Action Taken
1.	The course files have been prepared very well, seemingly based on a common format	The same will be continued in our academic process.
2.	All faculty have maintained a good report of their activities and their suggestions for further improvements	It will be continued in the coming years also.
3.	Feedback from students seem to have been collected systematically	It will be continued.
4.	There is nothing negative seen in the collection of data and preparation of the course files	Try to get these kind of positive feedbacks in the fore coming academic years
5.	It is good to note that many faculty use video lectures from eminent academicians to improve their courses.	The same will be continued in our academic process.
6.	In overall, the course files are good and deserve appreciation.	Try to get these kind of positive feedbacks in the fore coming academic years
7.	Having three internal exams is unnecessary as it puts too much load on the students to focus on theoretical studies to attain marks. Engineering is a practical course, and some time in each semester should be allocated to do practical work for application based courses like Embedded sensor networks, Digital Image Processing, IoT, communication networks etc	The point is noted.
8.	Question papers should have more of mathematical and application type of questions. The question papers seen here focus more on remembering theory.	This will be improved in the coming semester onwards

9.	The question paper pattern of choice between two big questions should be changed. There should be short answer type questions to test concepts.	This suggestion is considered in future process.
10.	Assignments in most courses should be either coding or hardware design as the programme is for Electronics.. Simulation tools are available for many topics and hardware based realization of sensor netwoks, IoT, etc. should be mandatory.	This point is well taken and will follow.
11.	Students should be exposed to high level language coding like C, C++, open CV etc.	It is in the process.
12.	The theoretical course on Matlab is unnecessary .It should be a practical lab course.	Noted and revised in future.
13.	In the course on Digital Image Processing, it would be advisable to replace/augment Matlab with open CV.	Thanks for the suggestion. It will be considered in the Board of Studies.

HoD

Dean

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department – **Electrical and Electronics Engineering**

S. No.	Comments from External Expert	Action Taken
1.	All the faculty members received good comments and four faculty members received excellent comments.	The external audit comment is circulated to all the faculty members through email.

General Comments:

1. The number of IA should be toned down from 3 to 2.
2. Each of IA to be 15 marks.QA should be 15 marks, Attendance is 5 marks and End Semester to be 50 marks.

Action Taken:

1. Since it is a policy decision, we submit the comments to our higher officials for further decision.

7.8.2020

HoD **Dean**

Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
MHRD Approved & NAAC Accredited
Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India.

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Biomedical Engineering / Robotics & Automation**

S. No.	Comments from External Expert	Action Taken
1.	1. Different target for different courses. Also in a single course different target for different COs.	Ensure Uniform target fixing for courses
2.	Reasons for not attaining the target. In many courses target is not reached for all COs.	Ensure Attaining the target for all Course Outcomes is uniform.
3.	Steps to be taken if CO attainment does not reach target.	
4.	Comments or feedback can be given on the answer sheets.	Ensure Feedback on performance to be written in the answer sheets.
5.	Question paper must be able to check Higher order thinking skills	Higher order thinking skills will be ensured in all the Question paper.

HoD

Dean

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Computer Science and Engineering**

S. No.	Comments from External Expert	Action Taken
1	It is observed that advanced curriculum and syllabus is in practice	No further action is required. However, the Department of CSE will continue enhancing the curriculum and syllabi.
2	It observed that course plans for teaching are well prepared and maintained.	No further action is required.
3	It is observed that curricular plans are executed in a planned manner to achieve the course outcomes.	No further action is required.
4	It is observed that reliable assessment process is followed through the use of standard evaluation components.	No further action is required.
5	There are no details found to ensure that assessments are performed as planned, and action taken on students' feedback to improve the teaching quality as well as course quality.	Assessments are carried out as per the schedule through IA & QA. Student' feedback and action taken are available with the faculty and Department. It can be added in the course file if required by the office of QAA.

6	It is to suggest that department can define the key quality indicators of student performance based on the POs.	This will be taken up by the directions of the office of QAA.
7	It is to suggest that more add-on courses suggested by NASSCOM, SWYAM, NSF etc. can be included.	CSE students undergo globally recognized industrial certification courses. Also, students take up the online courses offered by NPTEL-SWAYAM and the appropriate credits are given. The details will be included as per the guidelines of the office of QAA.
8	It is to suggest that department can come up with one new best teaching-learning practice every year	Every faculty adopts his/her own teaching methodology. However, as per the suggestion, best practices will be shared among the faculty to enhance the teaching-learning process.

HoD-CSE

Dean-E &T

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Biotechnology**

Comments from External Expert	**Action Taken**
Blooms taxonomy should be followed in the question paper preparation	In most cases the Blooms were followed, wherever left out, this will be ensured.
The faculty should practice more teaching methods other than the Videos and PPTs	Newer teaching methods like Google apps, Elsevier research article writing tools, various our digital platforms will be followed as appropriate
Co attainment calculations were prepared clearly in the excel file, and this can be distributed to all other faculty for better knowledge	These files will be circulated among faculty to be used as a template. Orientation if required will be carried out by these faculty experts
The teaching methodology utilized should have been more innovative other than chalk and talk.	Innovative teaching methodologies are planned for the ensuing semeter
The formulas evaluated in the course attainment excel file is showing errors " #DIV/0! The " Co Targets & Attainment in %" were different in excel file and pdf files.	Wrong cells were selected in computation by mistake. Revised file updated

The CO attainment calculations were incomplete.	Action taken for reworking on the file, will be ensured in future too
14BT2052 / 17BT2021- Student Feed Back 14BT2052 / 17BT2021- CO calculation Incomplete	Missed attaching the File. 2 subjects were handled by another faculty who left the institute. The Calculation is given at the end of the File in the Cumulative parameter (Calculation by the System)
Course outcome and attainment calculations are missing for all the courses.	Could not retrieve answer sheets which were submitted to COE office before carrying out the articulation file.
The keyword "Sample" in the figure legends should be removed. For instance, in the " Fig.1: Cumulative CO Attainment (Sample) (The Graph may change based on number of Course Outcomes)"	The comment is accepted by the faculty and will be taken care

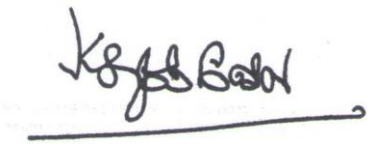
HoD **Dean**

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Department of Food Processing Technology**

S. No.	Comments from External Expert	Action Taken
1.	Few faculties have not placed the internal assessment answer sheets	Faculties are instructed to check for all the enclosure mandate for the course file before submission.
2.	In few courses the text books mentioned in the syllabus are not matching with the course	This suggestion was taken into account and in the new regulation (2020 regulation), the text books are suggested as per the syllabus framed.
3.	There is no industrial visit in the program which is essential for the students to understand the subjects	The students were taken to the industrial visit and details not shown in the course file. The details of the industrial visit will be included in the course file in future.



HoD

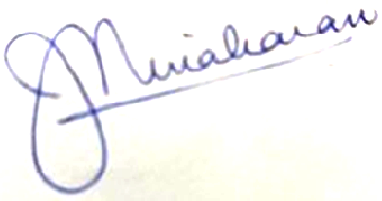
Dean

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **AGRICULUTRE**

S. No.	Comments from External Expert	Action Taken
1.	The existing assessment system with a mid-term examination can be split up into CAT1 & CAT2	As per ICAR V Dean's Committee Report, it is instructed to conduct one CAT in the middle of the semester
2.	In the assignment part, the students may be given with a problem statement and mentor them to come up with a solution	Similar pattern is followed as suggested, besides all courses follow an integrated structure of merging theory and practical and thus real field problems were identified and allotted to every student as assignment.
3.	The answer sheet uploads are not as per the guidelines (highest (31 to 40), lowest (11 to 20 marks) and average (21 to 30 marks)	Answer sheet uploads were carried as per the guidelines.
4.	It is better to have higher order thinking questions in the mid-term and final tests	The question paper for final examinations are being set by external experts from other Agricultural colleges and hence the same pattern is being followed for midterm exam also.
5.	Innovative teaching methods may be improved by including project based learning, Jigsaws, QR Codes etc.	Most of the course teachers have adopted innovative teaching methods including Jigsaws. Efforts will be taken to ensure the teaching-learning process is very interesting and innovative across the entire Department of Agriculture



HoD **Dean**

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Mathematics**

S. No.	Comments from External Expert	Action Taken
1.	Quality of Internal Assessment question papers and the quality of evaluation of answer scripts is generally very good	-
2.	Quality Assessment given to the students may be improved by giving a smallpercentage of challenging questions.	Suggestion is well taken
3.	Attainment of Course Outcomes is reasonable.	-
4.	More innovative Teaching Practices may be experimented and incorporatedthat is suitable for situations like covid-19 pandemic.	Suggestion is well taken and now new Methods of Teaching Strategies are followed in online teaching due to covid -19 pandemic
5.	While describing CO's, use of quantifiable verbs are suggested, use Blooms taxonomy	Most of the CO's follows Blooms Taxonomy
6.	Student participation is more _encouraged in classes.	Suggestion is well taken
7.	Encouraged to solve/study at least one real life case study problem in probabilityand numerical methods	Suggestion is well taken
8.	Seminars, Mini projects, presentations etc. are encouraged and should be doneeffectively	Suggestion is well taken and conducted value add on courses, faculty development programs and few faculties got seed money
9.	Student feed backs and Teacher evaluation may be collected for each course.	Already we are doing that in Eduserve
10.	Suggestions for improving course learning level may also be collected fromstudents	Suggestion is well taken

HoD **Dean**

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Applied Physics**

S. No.	Comments from External Expert	Action Taken
1.	The syllabus for most of the courses are standard and similar to what other universities offer. The one important suggestion I would like to give is on the evaluation method adopted. Except for one or two courses, the evaluation method used only tests students power to memorize the theory. Though this is the standard approach most of the universities follow, this is high time that we change this. A question pattern which actually test the student in all areas (Bloom's taxonomy) not in paper but in practice should be followed to the extend possible especially in core courses.	The question papers would be scrutinized by a committee constituted of senior faculty would be imitated from coming semester onwards
2.	Giving students only few grades – like only A and B or O and A should be avoided when there is a clear mark distribution among students. Clubbing students who all got, for e.g. marks between 60 to 90 in A grade does not really reflect the performance of the students and it only gives a false sense of achievement to the students. This should be avoided and may the institute could make a policy or guidelines on these matters.	This issue has been removed and now the grads has been clearly categorized
3.	Assessment (IA1 – 3 and End Sem predominantly looks like a memory test for students. Would suggest to include questions that will test the students understanding of the concepts.)	Understanding and apply level questions will be incorporated where ever possible and has been informed to all the faculty

4.	The syllabus first part – i.e. mechanics part – is something the students study in their +1/+2. For an Msc course in Nano atleast the level of books like Kleppner should be followed.	The basic mechanics has been taught since it is a five year integrated M.Sc program and the paper is 2 level undergraduate course
5.	QM-II is advanced topic and here asking just textbook theory questions for assessment will not serve the purpose. This will not tell how well the students have understood the subject.	The concerned faculty has been asked to set the question papers on apply level
6.	In the semiconductor physics course there is very nice scope to give problems based on devices to gauge the students understanding of the subject. But the questions provided are mostly standard theoretical questions from the syllabus.	In the revised curriculum of 2020, tutorial component has been added to solve this issue.

HoD **Dean**

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department:**NANOSCIENCE**

S. No.	Comments from External Expert	Action Taken
1.	Though this is a M.Sc. Nanoscience course and students may be coming from different background (different bachelor degree program and not necessarily from Bsc Physics), some of the courses have contents (as given in the excel) topics that are +1/+2 level and could be avoided and more emphasis be given to relevant new topics.	This is a 5 year integerated MSc., Programme, and the students join directly after +2, hence we have some of the courses with contents (as given in the excel) topics that are +1/+2 level, which becomes mandatory at this level.
2.	There is very nice scope to give problems based on devices to gauge the students understanding of the subject. But the questions provided are mostly standard theoretical questions from the syllabus. (Subjects - 16NT3004, 16NT3002 and 16NT3013)	The subject faculty has been informed about this and they will be including problems where ever possible.
3.	Teaching practices details not given.	The concerned faculty has been informed about this and he/she assured to include the details hereafter.
4.	There seems to be a mistake in the entry on no. of students who had less than 50% marks in IA2 and IA3	This is a typographical error, where instead of typing 0/14, the faculty has mistakenly typed 14/14.
5.	There is a deviation in the form 2 details on the no. of students and the form no. 4 details.	This is because Form 2 reports the internal mark details (for which there may be some absentees, T1-33, T2-32, T3-33), whereas form 4 reports the final exam grade where all students (33) were present.

(Dr.Muthu Vijayan Enoch)
HoD

Dean

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **……APPLIED CHEMISTRY……**

S. No.	Comments from External Expert	Action Taken
1.	Teaching plan need to be at par with the expectations of the course	The faculty members have been intimated to set the teaching plan at par with the expectations of the course
2.	Satisfactory in all courses, but care needed for many of the assessment factors in all the data sheets provided	The faculty members have been informed to take care of the assessment factors of the data sheets provided
3.	Repetitions are many, which could be avoided	The faculty members have been advised to avoid repetitions

HoD **Dean**

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department:**English**

S. No.	Comments from External Expert	Action Taken
1.	While preparing Teaching Plan it may be worthwhile to mention the number of hours to be spent on each unit. This will indicate that the faculty, after careful consideration of the importance of topics/ themes, has allotted appropriate/ sufficient number of hours.	The number of hours are given in teaching plan for all the Units.
2.	In the plan it is suggested that the faculty mention the total number of hours allotted for that particular course.	Normally, it is based on the credits allotted for the course. For 1:0:1 credit course15 hrs. for theory and 30 hrs. are allotted for the Lab sessions; For 3:0:0 credit course 45 hrs. are allotted and for 3:1:0 credit course 60 hrs. are allotted. Based on it the teaching plan is prepared.
3.	In some cases, reference books are quite old. It is suggested to avoid books published before 2005 as reference texts unless they are seminal and absolutely significant.	Adequate care is taken to include books published after 2005 in the new syllabus.
4.	Mention clearly whether books mentioned are prescribed texts or reference books.	Noted
5.	For courses pertaining to English literature the list of reference books is quite scanty.	It depends on the learners' need as well as the availability of sources.
6.	While selecting topics to be taught keep in mind their practical relevance to the core subjects they are studying. For example,teaching Phonetic transcription to Nanotechnology students may be reconsidered.	Noted

7.	There should be complete congruity between course objectives and expected course outcomes.	Based on the Course Objectives teaching and learning modules are prepared and hence the outcomes would be appropriate and relevant. If Course objectives are general the course outcome would be specific. Further this remark is not supported by any evidences or proofs
8.	In most cases the pedagogical tools are limited to lectures, PPTs, and presentations. Innovative use of technology using several freely available applications such as Google classroom and Moodle may be considered. In other words, use of educational technology needs to be enhanced.	Innovative use of technology is used for almost all subjects in the present semester
9.	For Postgraduate students of English term papers and MOOC courses may be considered.	Term Papers are given in the fourth Semester. A few students have registered in recommended Online Courses and have completed few courses in MOOC and Coursera
10.	In Research methodology paper instead of testing students in theory in the end semester examination it may be made completely application oriented.	Application oriented questions are incorporated in the questions as well as they are given practical and purposeful assignments
11.	Question papers must be error free. Proofread carefully to avoid spelling and grammatical errors. Besides confusing students, it reflects poorly of the department.	Every question is proofread and again scrutinized by the CoE office. This is generic comment and there is no specific mentioning.
12.	It is imperative that a word limit is mentioned for descriptive answers.	Effective questions provide a well-defined task for students, and comprehending the questions they attempt to write the answers appropriately. Hence it is not necessary to mention the word limit for descriptive answers.
13.	It is observed that in some cases evaluation is erratic, very liberal and as a result there is a huge variation between teachers. To avoid this, it is suggested that the faculty develop rubrics for answers, especially for descriptive types.	It is informed to all faculty members and common papers do have rubrics for answers. Answer key that is prepared insists on parameters to be observed during evaluation.
14.	This will also help students to prepare better and write answers knowing fully well on what parameters they will be evaluated.	Noted
15.	Further this system will help the faculty while giving feedback to students.	Noted

16.	While evaluating the answer scripts a few written comments (written legibly) indicating where the student has erred or where they could do better may be a good practice.	It is followed and will be reiterated.
17.	Writing skills / academic writing may be given more attention.	Noted
18.	In general, avoid undue importance to canonical writings and give more importance to contemporary works.	Based on the syllabus, the contemporary works are used significantly
19.	Wherever there is a small number of students teaching pedagogy through innovative practices could be greatly enhanced.	Innovative practices are followed.
20.	For Engineering and science students more emphasis may be given to applied grammar, conversational / functional English and Writing skills.	It is already incorporated in the syllabus. Classroom tasks and evaluation process take place as per the syllabus

HoD **Dean**

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **MANAGEMENT STUDIES**

S. No.	Comments from External Expert	Action Taken
1.	Suggested to conduct active industry – institute interactions in understanding real- life projects and case studies. (may include credits for the courses on projects). This may eventually result in a conclave where the live projects/academic projects may be evaluated with a closedViva-Voce.	The Industry-Institute Interactions are continuously followed in each subject, through the "Mini Projects" practice embedded in the curriculum for Quality Assessment. The live projects / academic projects are implemented with course credits in the final semester.
2.	Recommended to have"Entrepreneurship"asafocalsubject ofthedepartment. Hence, a reframing of the courses in the curriculum to include courses of importance in the current scenario is suggested.	"Entrepreneurship" subjects are offered as Specialization Pathways. The suggestion has been accepted and implemented with a new course "New Venture Creation/Modelling a Business Planfor the Incoming 2020 Batch.
3.	Suggested to give practical soft skills/Personality development training to students.	Its already there as part of Placement Training. We give 60 hrs of training comprising of all the core elements. Further we also give company specific training as well.
4.	Recommended to include the subscriptions for cases and caselets from HBR, Ivey B-Schools and soon	Implemented and Followed by all faculty in all the respective subjects.
5.	Suggested to include practical components by the use of analytical software's for courses viz; Marketing Analytics, HR Analytics, Accounting for Managers and so on.	The Practical components are embedded in the curriculum. The Accounting for Managers course givehands on in Tally ERP 9.1 The SPSS software give hands on for

		Analytics courses. HR Analytics and Marketing Analytics are integrated in their respective specializations., Further, The CIME-Prowess software is now available for the students to assist in their live projects.
6.	Highly recommended to use Case Simulations for study of managementcourses.	Every faculty is trained to administer case studies in their respective courses. The suggestion has been shared to all faculty and instructed to uphold the instruction accordingly.

HoD

Dean

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **Department of Commerce and International Trade**

S. No.	Comments from External Expert	Action Taken
1.	Course outcome are many but not used in questions or assessment. Course outcomes of some courses must be fine-tuned	Course outcomes are fine tuned and will be implemented in the forth coming years. It will be properly used in questions or assessment
2.	Blooms taxonomy metrics are not properly matched with the wordings of questions.	Communicated to all faculty members to do it properly
3.	Scanned Answer Sheets for some faculty members are not clear. Grammatical Errors and Typo Errors can be avoided	Communicated to all faculty members to do it properly
4.	Out of 11 metrics given in the Quality Assessments 2 to 3 are alone given significance	Choosing of metrics to a particular subject depends on the on the nature of the subjects handled by the faculty. However, it has been communicated to all the faculty
5.	Fast learners may be motivated to help slow learners to reduce the failure.	Communicated to all faculty members to do it timely and immediately. It is observed that it happens automatically in Hostels, during examination times.
6.	Innovation and Best Practices should be strengthened, technology, online courses, social media can better be adopted. Newspapers (such as Economic Times, Financial Express) reading should be inculcated to enhance the updates.	Communicated to all faculty members to do it effectively and immediately
7.	Guest Lecture/Industry relevant subjects	In the new curriculum, its included in the last units, which will be mostly on recent trends, which will be handled by Industry practioners.

HoD **Dean**

ACTION TAKEN REPORT ON THE COMMENTS GIVEN BY EXTERNAL COURSE FILE AUDITOR

ODD SEMESTER OF THE ACADEMIC YEAR 2019-20

Name of the Department: **DIGITAL SCIENCES**

S. No.	Comments from External Expert	Action Taken
1.	It is observed that for some text books/reference books details mentioned in the course plan are incomplete. Suggested to inform all the course instructor/faculty to write complete details such as Author(s) Name(s), Title of the book, Edition of the book, Publisher Name.	The comment given by the expert will be verified and it will be corrected. All the courses offered are re-visited after three years. All the information stated by the expert will be incorporated.
2.	If Bloom's Taxonomy adopted to measure the Course Outcome then mention level (L1/ L2/L3/L4/L5/L6) with the Course Outcome. For example, CO(L1).	The comment given by the expert will be incorporated in the ensuing semester for the present First year students onwards.
3.	Suggested not to ask one-mark question(s) for UG/PG level courses.	The suggestion given by the expert will be informed to all faculty members.
4.	Include "**Total Marks in Words**" option in front sheet of the Internal Test Answer Booklet. Further, amend *"Signature of the Examiner"* as *"Signature of the Examiner with Date".*	The suggestion given by the expert will be informed to the higher officials for necessary action.
5.	Not to give a single question of 15/20 Marks. Reason is that, if a student is unable to attend such type of question(s), student will be under loss.	The suggestion given by the expert will be discussed in the faculty meeting and proper action will be taken.
6.	Most of the questions are Theory-oriented. Thus, suggested to include theory as well as, analytical questions (if applicable).	The suggestion given by the expert will be discussed in the faculty meeting and faculty will be directed to provide analytical questions in the internal and end semester exams.

7.	Suggested use common Course Plan Format.	Common course plan format is followed in the Department. The comment given by the expert will be verified and the faculty will be directed to use the common format.
8.	Show individual components of the Faculty Feedback form and also generate Faculty Feedback Form individually for each course/subject.	The suggestion given by the expert will be informed and forwarded to the higher officials for necessary action.
9.	To provide practical exposure to students, suggest to convert technical courses which are of the 3-0-0 form into 3-0-2 courses	The practice is followed as separate components for theory and lab as 3:0:0 and 0:0:2 respectively. As per the suggestion given by the external expert, discussion will be initiated in CDC and BoS for incorporation.

HoD **Dean**