The Annual Quality Assurance Report (AQAR) of the IQAC
2013-14

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. *(Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)*

Part – A

1. Details of the Institution

1.1 Name of the Institution

> Cochin University of Science and Technology

1.2 Address Line 1

> Cochin University P.O

Address Line 2

> Kochi

City/Town

> Ernakulam

State

> Kerala

Pin Code

> 682022

Institution e-mail address

> regoffcus@gmail.com,
> registrar@cusat.ac.in

Contact Nos.

> 0484-2575396

Name of the Head of the Institution:

> Dr.Ramachandran Thekkedath

Tel. No. with STD Code:

> 0484-2577619

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLGY

Mobile:

> 0944761133

Name of the IQAC Co-ordinator:

> Dr. A. N. Balchand

Mobile:

> 09895247787

IQAC e-mail address:

> naac_cusat@cusat.ac.in

1.3 **NAAC Track ID** *(For ex. MHCOGN 18879)*

> KLUNGN10039

1.4 **NAAC Executive Committee No. & Date:**
   (For Example EC/32/A&A/143 dated 3-5-2004.
   This EC no. is available in the right corner- bottom
   of your institution's Accreditation Certificate)

1.5 Website address:

> www.cusat.ac.in

Web-link of the AQAR:

> http://cusat.ac.in/iqac

For ex. http://www.ladykeanecollege.edu.in/AQAR2012-13.doc

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle	Three Star		2001	2006
2	2nd Cycle				
3	3rd Cycle				
4	4th Cycle				

1.7 Date of Establishment of IQAC :   DD/MM/YYYY   10/04/2007

1.8 AQAR for the year *(for example 2010-11)*

2013-14

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((*for example AQAR 2010-11submitted to NAAC on 12-10-2011)*

    i.   AQAR 2012-13 – 28/01/2014
    ii. AQAR 2011-12 - 28/01/2014
    iii. AQAR 2010-11 - 28/01/2014
    iv. AQAR 2009-10 - 28/01/2014

1.10 Institutional Status

University   State [√] Central [ ] Deemed [ ] Private [ ]

Affiliated College   Yes [ ] No [√]

Constituent College   Yes [ ] No [√]

Autonomous college of UGC   Yes [ ] No [√]

Regulatory Agency approved Institution   Yes [√] No [ ]

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution   Co-education [√] Men [ ] Women [ ]

    Urban [√] Rural [√] Tribal [ ]

Financial Status   Grant-in-aid [ ] UGC 2(f) [√] UGC 12B [√]

    Grant-in-aid + Self Financing [√] Totally Self-financing [ ]

1.11 Type of Faculty/Programme

Arts [√] Science [√] Commerce [ ] Law [√] PEI (Phys Edu) [ ]

TEI (Edu) [ ] Engineering [√] Health Science [ ] Management [√]

Others (Specify)   Marine Sciences, Environmental Studies, Humanities, Technology, Social Sciences

COCHIN UNIVERSITY OF SCIENCE AND TECHNOLGY

1.12 Name of the Affiliating University *(for the Colleges)*

Not Applicable

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University [ ]

University with Potential for Excellence [ ]   UGC-CPE [ ]

DST Star Scheme [ ]   UGC-CE [ ]

UGC-Special Assistance Programme [√]   DST-FIST [√]

UGC-Innovative PG programmes [√]   Any other *(Specify)* [DST-PURSE]

UGC-COP Programmes [ ]

2. IQAC Composition and Activities

2.1 No. of Teachers | 8 |

2.2 No. of Administrative/Technical staff | 3 |

2.3 No. of students | 0 |

2.4 No. of Management representatives | 2 |

2.5 No. of Alumni | 0 |

2. 6 No. of any other stakeholder and
     community representatives | 0 |

2.7 No. of Employers/ Industrialists | 0 |

2.8 No. of other External Experts | 2 |

2.9 Total No. of members | 17 |

2.10 No. of IQAC meetings held   : 2

2.11 No. of meetings with various stakeholders: No. | 1 | Faculty | √ |

Non-Teaching Staff | | Students | | Alumni | |

Others | 6 |

2.12 Has IQAC received any funding from UGC during the year?   Yes | | No | √ |

If yes, mention the amount | |

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. | 0 | International | | National | 1 | State | | Institution Level | |

(ii) Themes | RUSA – Scheme and its Implications, within IQAC. |

2.14 Significant Activities and contributions made by IQAC

| Preparation of RUSA proposals to the tune of over 200 crore |

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements
Preparing University to NAAC re-accreditation	6 meetings of co-convenors held, documentation completed. Submission of SSR in January 2014.

 * *Attach the Academic Calendar of the year as Annexure.*

2.15 Whether the AQAR was placed in statutory body   Yes | Y | No | |

Management | | Syndicate | | Any other body | Y |

Provide the details of the action taken

> Departments / Schools contributed in a systematic manner to content development of SSR and profiles.
>
> Documentation was mainly focussed at department level; a sense of general awareness to quality enhancement at all levels was evident in all spheres of University activities.

Part – B

Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	26	-	-	-
PG	46	1	5	30
UG	14	-	8	14
PG Diploma	3	-	-	1
Advanced Diploma	5	-	-	
Diploma	4	-	-	
Certificate	4	-	-	
Others				
M.Phil	9	-	-	
Integrated PhD	2	-	-	2
Total	113	1	13	47

Interdisciplinary	12	-	3	
Innovative	1	-	1	

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options - CBCS

(ii) Pattern of programmes:

Pattern	Number of programmes

Semester	62
Trimester	-
Annual	25

1.3 Feedback from stakeholders* Alumni [ ] Parents [ ] Employers [ ] Students [√]
   (On all aspects)

   Mode of feedback : online [ ] Manual [√] Co-operating schools (for PEI) [ ]

*Please provide an analysis of the feedback in the Annexure

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

> Yes, syllabi of 8 academic programmes were revised during 2013-14.
>
> New electives were formulated during the revision exercise based on the inputs from stakeholders and alumni.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

> Yes, K M Mani Centre for Budget Studies

Criterion – II

2. Teaching, Learning and Evaluations

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
237	58	110	69	-

2.2 No. of permanent faculty with Ph.D.   [182]

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
366	202	141	80	65	53	-	-	572	335

2.4 No. of Guest and Visiting faculty and Temporary faculty [112] [3] [131]

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	88	161	48
Presented papers	97	153	23
Resource Persons	44	152	51

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- ICT enabled teaching through (1)NPTEL (2)MOOC (3)D Space (4)MOODLE

- Inquiry based learning, Problem based learning, Case study method, Cooperative learning, Team project

2.7 Total No. of actual teaching days

during this academic year | 157 |

2.8 Examination/ Evaluation Reforms initiated by
     the Institution (for example: Open Book Examination, Bar Coding,
     Double Valuation, Photocopy, Online Multiple Choice Questions)

- The issue of degree certificates under fast track mode by which the students can have the same within a maximum period of 20 days from the date of application, once the result is published.

- Conduct of on-time examination as announced as per the academic calendar and results publication.

- Internal marks are displayed on the departmental notice board well before the commencement of external examination, so this will help students to seek corrections on marks they scored, if recorded wrongly; also students can judge themselves and prepare for the final external examinations.

- Any lapse in award of marks /evaluation in internal can be sorted out at departmental level by the students before finalization of internal marks.

2.9 No. of faculty members involved in curriculum
     restructuring/ revision/ syllabus development | 137 |
     as member of Board of Study/Faculty/Curriculum Development workshop

2.10 Average percentage of attendance of students | 86.18 |

2.11 Course/Programme wise distribution of pass percentage :

Title of the Programme	Total no. of students appeared	Distinction %	I %	II %	Pass %
M.Tech (Polymer Technology)	11	54.55%	45.45%	0.00%	100.00%
M.Tech (Opto electronics & Laser Technology)	9	88.89%	11.11%	0.00%	100.00%
M.Tech (Software Engg)	16	62.50%	37.50%	0.00%	100.00%
M.Tech (CIS)	18	88.89%	11.11%	0.00%	100.00%
M.Tech (Electronics)	20	80.00%	20.00%	0.00%	100.00%
M.Tech (CASAD)	14	41.67%	50.00%	8.33%	85.71%
M.Tech (PT) (Civil)	16	100.00%	0.00%	0.00%	87.50%
M.Tech (PT) (Electrical & Electronics)Power Engg	12	90.91%	9.09%	0.00%	91.67%
M.Tech (PT) (Mechanical)Production Engg	16	75.00%	25.00%	0.00%	100.00%
M.Tech (PT) (Chemical)Process Engg	16	33.33%	66.67%	0.00%	93.75%
M.Tech Marine Biotechnology	6	83.33%	16.67%	0.00%	100.00%
MBA -BRIM,KVM,CONSPI & TIST	196	9.80%	86.27%	3.92%	26.02%
MBA-(FT) SMS	57	2.78%	97.22%	0.00%	63.16%
MBA-(TT) SMS	59	4.00%	96.00%	0.00%	42.37%
MBA-(IB) SMS	56	0.00%	100.00%	0.00%	67.86%
MBA-(PT) SMS	24	8.33%	91.67%	0.00%	50.00%
M.Sc Electronics Science	21	71.43%	28.57%	0.00%	66.67%
5 Yr integrated M.Sc Photonics	14	81.82%	18.18%	0.00%	78.57%
MCA	140	52.86%	47.14%	0.00%	50.00%
M.Tech -Ocean Technology	8	87.50%	12.50%	0.00%	100.00%
MCA–DCA	58	68.57%	31.43%	0.00%	60.34%
MCA–CUCEK	44	64.71%	35.29%	0.00%	38.64%
M.sc Marine Geology	10	10.00%	90.00%	0.00%	100.00%
M.Sc Marine Geophysics	12	9.09%	90.91%	0.00%	91.67%
M.Sc Marine Biology	18	94.44%	5.56%	0.00%	100.00%
M.Sc-Oceanography	12	50.00%	50.00%	0.00%	66.67%
M.Sc-Industrial Fisheries	18	29.41%	70.59%	0.00%	94.44%
M.Sc Hydrochemistry	12	63.64%	45.45%	0.00%	91.67%
M.Sc Meteorology	6	0.00%	100.00%	0.00%	83.33%

M.Phil Life Science	6	100.00%	0.00%	0.00%	100.00%
M.Phil Fisheries Science	8	75.00%	25.00%	0.00%	100.00%
M.Phil Marine Chemistry	8	100.00%	0.00%	0.00%	100.00%
M.Phil Applied Economics	8	0.00%	87.50%	12.50%	100.00%
M.Phil-Hindi	10	100.00%	0.00%	0.00%	100.00%
M.Phil-Chemistry	6	33.33%	66.67%	0.00%	100.00%
M.Phil-Maths	8	75.00%	25.00%	0.00%	100.00%
PG Diploma in Hindi	23	0.00%	138.46%	30.77%	56.52%
M.Sc -Applied Chemistry	20	35.00%	65.00%	0.00%	100.00%
MA Hindi	27	51.85%	48.15%	0.00%	100.00%
M.Sc -Maths	35	30.00%	65.00%	5.00%	57.14%
M.Sc -Statistics	24	22.73%	63.64%	13.64%	91.67%
M.Sc Instrumentation	18	33.33%	66.67%	0.00%	83.33%
Msc Environmentel Technology	9	77.78%	22.22%	0.00%	100.00%
M.sc Biotechnology -Department of Biotechnology CUSAT	10	90.00%	10.00%	0.00%	100.00%
M.sc Biotechnology KVM College	18	17.65%	82.35%	0.00%	94.44%
M.sc Physics	27	42.31%	57.69%	0.00%	96.30%
M.Phil -Marine Chemistry	8	100.00%	0.00%	0.00%	100.00%
M.phil physics	7	100.00%	0.00%	0.00%	100.00%
MA Applied Economics	15	13.33%	86.67%	0.00%	100.00%
German (Certificate /Diploma/Integrated Diploma)	18	0.00%	38.46%	61.54%	72.22%
Italian (Certificate /Diploma/Integrated Diploma)	10	55.56%	33.33%	11.11%	90.00%
French (Certificate /Diploma/Integrated Diploma)	14	7.14%	14.29%	78.57%	100.00%
Japanese (Certificate /Diploma/Integrated Diploma)	3	0.00%	66.67%	33.33%	100.00%
M.B.B.S	91	1.59%	47.62%	50.79%	69.23%
PG Diploma in Communicative English	8	0.00%	71.43%	28.57%	87.50%
LLM	29	0.00%	100.00%	0.00%	82.76%
M.Tech Degree in Engg Statistics	7	57.14%	42.86%	0.00%	100.00%
M.Tech Degree in Atmospheric Science	3	66.67%	33.33%	0.00%	100.00%
M.Tech Degree in Industrial Catalysis	16	68.75%	31.25%	0.00%	100.00%

M.Tech Degree in Electronics With Specialization in Wireless Technology	16	68.75%	31.25%	0.00%	100.00%
M.Tech degree in civil Engg with Spln in Geotechnical Engg	17	70.59%	29.41%	0.00%	100.00%
M.Tech degree in Mech Engg with Spln in Thermal Engg	17	29.41%	70.59%	0.00%	100.00%
M.Tech degree in Computer science with Spln in Embedded System	13	23.08%	76.92%	0.00%	100.00%
MSc Degree in Biopolymer science	20	57.89%	42.11%	0.00%	95.00%
5 Year BBA LLB (Hons)	33	6.45%	80.65%	0.00%	93.94%
MCA(KVM)	109	17.65%	82.35%	0.00%	46.79%
M.Sc Degree in Information technology	15	40.00%	60.00%	0.00%	100.00%
M.Sc Degree in computer Sciencs	21	35.29%	64.71%	0.00%	80.95%
Mphil Computer science	15	100.00%	0.00%	0.00%	93.33%
Mphil Commerce	6	0.00%	100.00%	0.00%	100.00%
B.Tech NA&SB – Ship Technology	41	75.00%	25.00%	0.00%	68.29%
B.Tech Marine Engineering	30	10.71%	78.57%	10.71%	93.33%
B.Tech PS&E	20	25.00%	75.00%	0.00%	60.00%
B.Tech Instrumentation	34	0.00%	93.75%	6.25%	47.06%
B.Tech SCHOOL OF ENGINEERING	566	31.48%	68.20%	0.33%	53.89%
B.Tech CUCEK	312	29.10%	70.90%	0.00%	42.95%

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

Through meetings held at Head of the Department level. Examination section keeps a tab on results in the case of each program.

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	*Number of faculty benefitted*
Refresher courses	42
UGC – Faculty Improvement Programme	2
HRD programmes	17
Orientation programmes	10
Faculty exchange programme	5
Staff training conducted by the university	45
Staff training conducted by other institutions	52
Summer / Winter schools, Workshops, etc.	312
Others	104

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	596	71	-	164
Technical Staff	190	167	1	71

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

Planning and Development Department conduct scrutiny on projects and fund flow.

IQAC while compiling data on this criteria, observed that new, innovative project topics have to be addressed by faculty.

The practice of advancing grants against committed amounts to continue

Fuller autonomy is given to PI to use overhead charges

Post doctoral fellowship number and amount is under consideration for enhancement.

C SiS, starts a specialise centre in popularising Science at School level, which is a unique initiative from a University in this State.

Extension services from NCAAH is outstanding, based on reports in public domain

The number of Ph D theses uploaded to Shodhaganga site is constantly on the rise.

An outstanding recognition to CUSAT is the award of DST – PURSE program of 8.0 Crore based on H-index is worth noting.

University departments have now participating in flagship programs from Department of Space – namely the Oceansat I and II and Saral AltiKA.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	31	93	27	25
Outlay in Rs. Lakhs	572.03	5975.55	1013.17	515.19

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	2	5	2	7
Outlay in Rs. Lakhs	5.70	14.43	3.00	94.97

3.4 Details on research publications

	International	National	Others
Peer Review Journals	369	109	2
Non-Peer Review Journals	23	18	-
e-Journals	37	0	30
Conference proceedings	121	126	12

3.5 Details on Impact factor of publications:

Range 0 to 6.907   Average 1.7472   h-index 50   Nos. in SCOPUS 338

3.6

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	3-6	DST, KSCSTE, UGC, MNRE, DRDO, DBT, MoES, NRB, DAE-BRNS, ISRO, ICSSR, SAC	2,25,40,800	1,55,49,160
Minor Projects	1-3	UGC, KSCSTE, AICTE	15,14,000	9,13,000
Interdisciplinary Projects	1-6	DST-SERB,BRNS, MoES, UGC, DST, DBT, KSCSTE, MoEF. DoECC, MNRE	19,23,12,031	12,62,45,021
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	-	-	-	-
Students research projects *(other than compulsory by the University)*	2 months to 1 year	ASPIRE, TEQIP, KCSTE, DBT	60,08,029	20,85,000
Any other(Specify)	-	-	-	-
Total			**20,23,74,860**	**14,47,92,181**

3.7 No. of books published   i) With ISBN No.   16   Chapters in Edited Books   12

ii) Without ISBN No.   1

3.8 No. of University Departments receiving funds from

UGC-SAP 8   CAS 1   DST-FIST 10

DPE [ ]   DBT Scheme/funds 3

3.9 For colleges   Autonomy [ ]   CPE [ ]   DBT Star Scheme [ ]

INSPIRE [ ]   CE [ ]   Any Other (specify) [ ]

3.10 Revenue generated through consultancy in Rs.

| 27,61,490.00 |

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	6	14			
Sponsoring agencies	UGC/KSCSTE/DST/ DAE/ CSIR/AICTE,DBT,ISRO,VSSC,DST-JSPS	UGC/KSCSTE/ DRDO/DAE/ DST			

3.12 No. of faculty served as experts, chairpersons or resource persons   137

3.13 No. of collaborations   International 18   National 15   Any other

3.14 No. of linkages created during this year   14

3.15 Total budget for research for current year in lakhs :

From funding agency   **Rs. 1875.68 lakhs**

From Management of University/College   **Rs. 2.44 lakhs**

Total   **Rs. 1878.13 lakhs**

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	2
	Granted	0
International	Applied	-
	Granted	-
Commercialised	Applied	-
	Granted	-

3.17 No. of research awards/ recognitions received by faculty and research fellows
Of the institute in the year

Total	International	National	State	University	Dist	College
26	8	15		2		1

3.18 No. of faculty from the Institution
       who are Ph. D. Guides | 183 |

       and students registered under them | 1018 |

3.19 No. of Ph.D. awarded by faculty from the Institution | 117 |

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF | 136 | SRF | 121 | Project Fellows | 82 | Any other | 14 |

3.21 No. of students Participated in NSS events:

University level | 224 | State level | 58 |

National level | 11 | International level | - |

3.22   No. of students participated in NCC events:

University level | - | State level | - |

National level | - | International level | - |

3.23 No. of Awards won in NSS:

University level | - | State level | - |

National level | - | International level | - |

3.24 No. of Awards won in NCC:

University level | - | State level | - |

National level | - | International level | - |

3.25 No. of Extension activities organized

University forum | 7 | College forum | |

NCC | | NSS | 3 |

Any other :
       155 Schools visited and 13,352 School Students participated in the One Day Attachment
Programme (ODAP) of Centre for Science in Society (C-SiS) of the University during 2013-14. This is a
programme which aims at acquainting children with various science principles and experimental set up,

through interactive study materials. A well planned programme for batches of students from one or two schools which reserve the facilities of C-SiS for a day

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

1. Conducted Science and Total Capacity Talent Development Programme (STDP) (Mid-summer Programme) by Centre for Science in Society (C-SiS) an intensive programme meant for children with special aptitude for science.
   The Mid-Summer Programme (STDP-M1) started in first week of April and continued till the end of the Month.
   The Mid-Summer Programme (STDP-M2) suitable for Schools with vacation in May / June started in 1st week of May and ended in the last weeks of the month.
   A total of 300 students participated in this programme.

2. One Day Attachment Programme (ODAP) by C-SiS.
   155 Schools visited and 13,352 School Students participated in the One Day Attachment Programme (ODAP) of Centre for Science in Society (C-SiS) of the University during 2013-14. This is a programme which aims at acquainting children with various science principles and experimental set up, through interactive study materials. A well planned programme for batches of students from one or two schools which reserve the facilities of C-SiS for a day.

3. conducted "Kalajadha" against usage of alcohol and drugs by NSS in association with the EXCISE Department, Government of Kerala on 13.03.2014.

4. "Enlightening of Scientific Spirit and Awareness among School Students and Teachers through a 'Two-in-One' project for the benefit of School Children and their teachers to develop scientific awareness and passion for knowledge through various learning processes using innovative science gadgets and books" conducted by C-SiS. About 108 Schools visited and 9385 students were participated in this programme.

5. Conducted a Workshop for High school &Higher Secondary Teachers' (8th&15th February 2014) by C-SiS.

6. Conducted a Breast Cancer Awareness Campaign "I Love My MOM" on 5th December 2013 by Department of Youth Welfare.

Criterion – IV
4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	170845 m^2	6863 m^2	UGC, DST, State Govt	177708 m^2
Class rooms	161	-		161
Laboratories	180	7	MoES, KSCSTE, UGC,	187

			Industry Sponsored, University Fund	
Seminar Halls	26	1	UGC	27
No. of important equipments purchased (≥ 1-0 lakh) during the current year.		49	DST, DBT, MoES, KSCSTE, UGC, SERB etc.	
Value of the equipment purchased during the year (Rs. in Lakhs)		Rs. 35,928,617		

4.2 Computerization of administration and library

Admission, Financial and Examination processes are computerised.
Computerization/ Digitalization of University Central Library:

- Automated library with Open source software KOHA
- Library Collection is available through the Web OPAC
- Union Catalogue which upholds bibliographic description, locations and holding information about all the department libraries functioning under CUSAT
- CUSAT library has IP enabled access to online journals under the UGC Infonet Digital library consortium, and INDEST consortium set up in the campus network and the library itself subscribes number of e-journals
- CUSAT library is a member of DELNET (Developing Library Network) which offers services like union catalogue of books, e-books, journals, e-journals; interlibrary loan of books; photocopies of journal articles through document delivery service, etc
- Federated searching tools-EBSCO discovery service which enables a user to search all the library resources in a single query, including books, ebooks, subscribed electronic resources is available on the library website.
- Library website provides access to all the subscribed electronic resources, including, electronic databases, e-journals, journal archives, e-books, OPAC, union catalog, etc. In addition, the library website provides access to the institutional wealth of CUSAT
- Institutional Repository project using DSpace named Dyuthi is started for digitalization of thesis and research papers of CUSAT Community.
- Bibliographic Information System for Science & Technology (BISSAT) established, namely yuj available at yuj.cusat.ac.in
- Media repository for archiving video of CUSAT events available at media.cusat.ac.in
- Traditional Digital Library is available at dyuthi.cusat.ac.in/TKDL
- Established the ETD lab and digitized around 2000+ theses and uploaded into the shodhganga project . Gives assistance for research scholars in making use of the antiplagiarism software-Urkund
- The library modernization project of Rs.8.3 crores funded by the State Government is progressing well; Rs 5.3 crores is allotted to construct a new building for the library and e-journals and databases are procured for Rs.1 crore. The remaining amount will be used to provide better service to students

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	270,456		3243		559,013	
Reference Books	45,735		770		88,615	
e-Books	752		102		1,014	
Journals	611		101		902	
e-Journals	375,549				375,549	
Digital Database	11		-		36	
CD & Video	621		17		1,379	
Others (specify)						

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	1595	51 labs	1088	36	58	269	1418	
Added	138		28		4	20	90	
Total	1729	51 labs	1116	36	62	289	1508	

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

CUSAT possess a state of the art, reliable and scaleable campus wide network which support the information needs of the user community. All the departments in the main campus are interlinked with a fiber optic backbone. Also the Lakeside Campus 15 Km away and the pulincunnu campus 70 km away from the main campus are connected to the main network. The campus network is seamlessly integrated to the internet through broad band connectivity available to the user community on 24x7 basis. The campus is connected to the National Knowledge Network (NKN) using one Gbps backbone connecting major institutions in India.

In collaboration with Dutch government through MHO-Co-operation project state-of-the art fibre optic backbone was designed, implemented and operated in the university during the period 1997-2004. This project played the baseline for our further endeavours in the area of ICT and related technologies.

Currently CUSAT uses integrated enterprise level applications for most of the activities of an academic organization. This include applications for Administration, Examination, Student admissions, Finance management, Accounts management, Recruitment, Management of different programs like conferences, seminars and symposiums, Digital Library and e-Learning. We have a broad vision for an ERP system for academics as an outcome of all our activities in this direction. We

have identified the technology components, implemented the solutions and we take care of operations management of these systems completely in-house in a cost effective manner.

The Kerala State Government had envisaged e-governance as a prerequisite to increase the efficiency. This system will process University wide transactions on a single software system with multiple functional systems that are designed to streamline almost every aspect of how the institution operates. This system can provide deep visibility to governing bodies at University, Higher Education Department and student level to analyze their performance and hence gear up for future requirements. Th software development process is under way.

4.6 Amount spent on maintenance in lakhs :

  i) ICT | 72.81

  ii) Campus Infrastructure and facilities | 240.92

  iii) Equipments | 49.50

  iv) Others |

  Total : | 363.23

Criterion – V
5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

> Nearly 1/3 students enrolled are provided with fellowships – this aspect was brought to the attention of student community.
>
> A casual study on gender reveals the 'Women Centric" approach of University.
>
> NSS and Physical Education department project greater role for students in social life

5.2 Efforts made by the institution for tracking the progression

> This was attempt through analysis of examination results

5.3 (a) Total Number of students

UG	PG	PhD	Others
4283	1938	1088	248

(b) No. of students outside the state

1173

(c) No. of international students

6

Men

No	%
4774	64

Women

No	%
2713	36

	Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
4423	671	50	2069	36	7249	4342	658	78	2384	25	7487

Demand ratio   UG - 1:24   PG - 1:17

Dropout % - 1.27

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

No. of students beneficiaries

136

5.5 No. of students qualified in these examinations

NET | 79 | SET/SLET | 15 | GATE | 16 | CAT | 10 |

IAS/IPS etc | 2 | State PSC | 25 | UPSC | 6 | Others | 22 |

5.6 Details of student counselling and career guidance

University Employment Information & Guidance Bureau which is a joint venture of the University and the National Employment Service Department provides career guidance and disseminates occupational and vocational information to the student community so as to enable them to qualify/seek the job they aspire. Coaching classes of various competitive examinations like UGC-CSIR JRF/NET, LDC, Bank P O, Junior Telecom Officers, etc are also conducted by the Bureau.

No. of students benefitted

117

5.7 Details of campus placement

On campus			Off Campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
42	672	292	161

5.8 Details of gender sensitization programmes

Women's Welfare Organisation in the University conducted the following programmes:
- Class on *Stress Free Life* on 2014
- Workshop on 'Strengthening Women's Leadership'.
- Conducted Five Day's Residential Workshop on 'Sensitivity-Awarness-Motivation (SAM)' for Women Managers in the Higher Education Sector.
- As a part of observing International Women's Day, 2013, conducted a talk on the topic 'Democracy and Gender Inequality'.
- On 11-04-2013 a special talk on 'Listen to the Voices of Women' was given by Dr.Sangeetha Prathap.

5.9 Students Activities

5.9.1   No. of students participated in Sports, Games and other events

State/ University level 29   National level 14   International level -

No. of students participated in cultural events

State/ University level 24   National level 17   International level -

5.9.2   No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level 12   National level 2   International level -

Cultural: State/ University level 13   National level 11   International level -

5.10 Scholarships and Financial Support

	Number of students	Amount in Rs.
Financial support from institution	141	88,97,204
Financial support from government	676	3,10,34,734

Financial support from other sources	155	96,25,186
Number of students who received International/ National recognitions	31	27,77,543

5.11   Student organised / initiatives

Fairs   : State/ University level   [7]   National level   [7]   International level   [3]

Exhibition: State/ University level   [6]   National level   [2]   International level   [1]

5.12   No. of social initiatives undertaken by the students   [20]

5.13 Major grievances of students (if any) redressed: NONE

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

The University's basic philosophy and goals find eloquent expression in its Coat of Arms emblazoning the motto *"Tejaswinavadhitamastu"* which in essence means *"may the wisdom accrued defy us both the teacher and the taught and percolate to the Universe in its totality"*, which in essence means "may learning illumine us both" (the teacher and the taught).

The University shall have the following objectives as its mission:

(i) to prosecute and promote research in applied science, technology, industry, commerce, management and social science for the advancement of knowledge and for the betterment of society;

(ii) to provide facilities and offer opportunities for graduate and post-graduate education in applied science, technology, industry, commerce, management and social science by instruction, training, research, development and extension and by such other means as the University may deem fit;

(iii) to devise and implement programmes of education in applied science, technology, industry, commerce, management and social science that are relevant to the changing needs of society, in terms of breadth of diversity and depth of specialization;

(iv) to serve as a centre for fostering co-operation and exchange of ideas between the academic and research community on the one hand and industry on the other;

(v) to organise exchange programmes with other institutions of repute in India and abroad with a view to keeping abreast of the latest developments in relevant areas of teaching and research.

6.2 Does the Institution has a management Information System – yes, in respect to Financial Management.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1   Curriculum Development

Continued and persistent efforts are on to track syllabus content and its preparation.

Advisory circulated to ensure timely revision of curricula

6.3.2   Teaching and Learning

The University always endeavour to carry out technology assisted and participative teaching learning processes. It is planned to strengthen the feedback based evaluation system of teaching learning processes too.

6.3.3   Examination and Evaluation

Online application for examination registration and issue of hall tickets is in experimental stage.

6.3.4   Research and Development

The University always had and will continue to provide cutting edge facilities for the researchers with support from various funding agencies. New Research areas like, Nano technology, IPR, opto- electronics and lasers, marine biotechnology are being promoted. Project submissions are encouraged

6.3.5   Library, ICT and physical infrastructure / instrumentation

8 new major facilities were added during this year.

Bandwidth was augmented to ensure better connectivity

Budgetary provision for library stands enhanced

 Library has initiated new awareness programs for its users

A modernisation project of 8 Crore is being utilised for improvements in library

6.3.6   Human Resource Management

New recruitments are planned but for financial limitations, programs and workshops are planned to train and enhance the potential of existing faculty.

6.3.7   Faculty and Staff recruitment

Proposed in plan budget; support expected from Government in this regard. PSC appoint is a policy decision.

6.3.8   Industry Interaction / Collaboration

CITTIC is an exclusive Centre in this direction

6.3.9   Admission of Students

CAT is pursed as in previous years, to meet additional demands from applicants. Schedule was meticulously followed in this year too.

6.4 Welfare schemes for

a)   Welfare Schemes for Teaching as well as Non Teaching Staffs:

- Pension and Family Pension
- Medical Reimbursement Facility
- Leave Travel Allowance
- Cochin University Employees Society and Employees Welfare Fund are centered around the financial needs of the staffs

b)   Welfare Schemes for Students:

- Students Aid Fund: a scheme for giving financial assistance to the deserving students with low financial background but with good academic records.
- University is providing post doctoral fellowship of Rs.25,000/- per month with contingent grant of 20,000/- p.a
- The University is providing 150 research fellowships at a rate of Rs.12,500/- per month in the first two years and Rs.15,000/- per month for the next 1and ½ years with a contingent grant of Rs 10,000/- per annum
- Monthly stipend of Rs 5000/- is being provided to students undertaking projects outside University departments / schools.
-   Department of Youth Welfare is a formal platform in the University to design and implement youth policy which includes the issues related to motivation, participation, promotion and socio-economic and cultural settings within which young people grow up. The Department has organized a lot of programmes in the year 2013-14 for the purpose of building confidence, creativity and compassion among the students.

6.5 Total corpus fund generated | **Rs. 1,33,57,21,970/-** |

6.6 Whether annual financial audit has been done   Yes | √ | No | |

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic				
Administrative	Yes	Kerala Government Audit Department	Yes	Audit Wing of University

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes   Yes ☐   No √

For PG Programmes   Yes ☐   No √

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

- The issue of degree certificates under fast track mode by which the students can have the same within a maximum period of 20 days from the date of application, once the result is published.

- Conduct of on-time examination as announced as per the academic calendar and results publication.

- Internal marks are displayed on the departmental notice board well before the commencement of external examination, so this will help students to seek corrections on marks they scored, if recorded wrongly; also students can judge themselves and prepare for the final external examinations.

- Any lapse in award of marks /evaluation in internal can be sorted out at departmental level by the students before finalization of internal marks.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

    Not Applicable

6.11 Activities and support from the Alumni Association

Advisory in nature, the role of Alumni is crucial to the growth of new initiatives in this University. Some of the members of the Alumni devoted their time and support to promote new knowledge and shared their experiences with the youngsters.

6.12 Activities and support from the Parent – Teacher Association

The PTA fully cooperated with faculty in moulding the role of their pupil, in having supported their studies, in roles of character formation in UG programs, while a helping hand was extended to students of PG to pursue professional career.

6.13 Development programmes for support staff

Training programs in e-governance was conducted in this university.

6.14 Initiatives taken by the institution to make the campus eco-friendly

Green audit by NSS was initiated, and planting trees was encouraged by nature club; film shows from BBC Planet was screened for the advancement of thoughts on global warming.

Criterion – VII

7. <u>Innovations and Best Practices</u>

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

FDP has a liberal approach; RUSA proposal include various schemes for faculty and research development; PBAS system specified for different faculties keeping in tune with the provisions in UGC guidelines. Feedback system pursed in each program with dual level analysis – at department level and IQAC.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

1. The multi-purpose sports arena, which lent a new impetus to the sports/games activities of the university as well as a Student Amenity Centre were built.
2. Overall suggestions by IQAC in different spheres of activities are covered in the executive decisions arrived at Syndicate and at Academic Council meetings.

7.3 Give two Best Practices of the institution *(please see the format in the NAAC Self-study Manuals)*

Periodic revision of syllabus and introduction of new programs in frontier areas

7.4 Contribution to environmental awareness / protection

Through conduct of programs on Environmental Day and screening nature friendly films

7.5 Whether environmental audit was conducted?   Yes [Y]   No [   ]

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

Erudite programs have brought the best researcher / teacher to the Campus and amongst students and researchers

8. Plans of institution for next year

- To install Stratosphere Troposphere Radar in the campus.
- To setup a Space Pavilion by the Indian Space Research Oraganisation at the Centre for Science in Society.
- To organise Short term training programmes in School of Engineering.
- To initiate *"Walk with a Scholar",* a project providing opportunity to brilliant college students to visit the university and to interact with the researchers, with aid from Govt. Of Kerala.

Name: Dr.A.N.BALCHAND   *Name: Dr.J.LATHA*

_____   _____

Signature of the Coordinator, IQAC   *Signature of the Chairperson, IQAC*

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Abbreviations:

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential Excellence
UPSC	-	Union Public Service Commission

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