# Yearly Status Report - 2018-2019

| Part A | |
|---|---|
| **Data of the Institution** | |
| **1. Name of the Institution** | **SILICON INSTITUTE OF TECHNOLOGY** |
| Name of the head of the Institution | **Dr. Jaideep Talukdar** |
| Designation | **Principal** |
| Does the Institution function from own campus | **Yes** |
| Phone no/Alternate Phone no. | 06742728005 |
| Mobile no. | 9051419777 |
| Registered Email | **jaideep@silicon.ac.in** |
| Alternate Email | **principal@silicon.ac.in** |
| Address | **Silicon Hills, Patia** |
| City/Town | **Bhubaneswar** |
| State/UT | **Orissa** |
| Pincode | **750124** |

**2. Institutional Status**

| | |
|---|---|
| Autonomous Status (Provide date of Conformant of Autonomous Status) | **27-Sep-2018** |
| Type of Institution | **Co-education** |
| Location | **Urban** |
| Financial Status | **private** |
| Name of the IQAC co-ordinator/Director | **Dr.Siba Sankar Nayak** |
| Phone no/Alternate Phone no. | **06742728005** |
| Mobile no. | **9861930033** |
| Registered Email | **snayak@silicon.ac.in** |
| Alternate Email | **snayak_2009@yahoo.com** |

## 3. Website Address

| | |
|---|---|
| Web-link of the AQAR: (Previous Academic Year) | http://www.silicon.ac.in/sitbbsr/qualitypolicy |

| | |
|---|---|
| **4. Whether Academic Calendar prepared during the year** | **Yes** |
| if yes,whether it is uploaded in the institutional website: Weblink : | https://silicon.ac.in/wp-content/uploads/2022/01/Academic-Calendar-AY-2021-22.pdf |

## 5. Accrediation Details

| Cycle | Grade | CGPA | Year of Accrediation | Validity | |
|---|---|---|---|---|---|
| | | | | Period From | Period To |
| **1** | **A** | **3.04** | **2014** | **10-Dec-2014** | **09-Dec-2019** |
| **2** | **A** | **3.04** | **2018** | **04-Dec-2018** | **31-Dec-2023** |

| | |
|---|---|
| **6. Date of Establishment of IQAC** | **27-Jan-2012** |

## 7. Internal Quality Assurance System

| Quality initiatives by IQAC during the year for promoting quality culture | | |
|---|---|---|
| Item /Title of the quality initiative by IQAC | Date & Duration | Number of participants/ beneficiaries |

| Role of Assessment and Accreditation for Quality Assurance | 07-May-2019 02 | 45 |
|---|---|---|
| Role of IP &Technological innovation and Transfer under Make in India and start -up-india | 13-Jun-2019 01 | 39 |
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**8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

| Institution/Department/Faculty | Scheme | Funding Agency | Year of award with duration | Amount |
|---|---|---|---|---|
| No Data Entered/Not Applicable!!! | | | | |
| No Files Uploaded !!! | | | | |

| **9. Whether composition of IQAC as per latest NAAC guidelines:** | **Yes** |
|---|---|
| Upload latest notification of formation of IQAC | View File |
| **10. Number of IQAC meetings held during the year :** | **2** |
| The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website | **Yes** |
| Upload the minutes of meeting and action taken report | View File |
| **11. Whether IQAC received funding from any of the funding agency to support its activities during the year?** | **No** |

**12. Significant contributions made by IQAC during the current year(maximum five bullets)**

1) Preparation of a proposal for applying to Govt. for University status 2) More encouragement for faculty research 3) Yearly action plan of a dept, designed, implemented and monitored with respect to various quality parameters 4) Periodic review of the quality policy in view of global perspective 5) Emphasis on ICT based teaching learning methods

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**13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year**

| Plan of Action | Achivements/Outcomes |
|---|---|
| More emphasis on student innovations and start-ups. | Very encouraging with more participation by students with some winning state and National level hackathons. |
| Faculties are encouraged to guide student for Ph.D work. | More number of faculty registered as Ph.D guides with the parent University recognising the institute as a Nodal Research Center in streams. |
| At least one research paper per facuty per year in a reputed UGC notified journal | No and quality of paper gone up |
| [View File](#) | |

| | |
|---|---|
| **14. Whether AQAR was placed before statutory body ?** | **Yes** |

| Name of Statutory Body | Meeting Date |
|---|---|
| **Executive Council** | **16-Jul-2019** |

| | |
|---|---|
| **15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?** | **No** |
| **16. Whether institutional data submitted to AISHE:** | **Yes** |
| Year of Submission | **2020** |
| Date of Submission | **03-Feb-2020** |
| **17. Does the Institution have Management Information System ?** | **Yes** |
| If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words) | **All academic and administrative issues processed through ERP managed by the institute, The various modules include student admission, fees, hostel admission, their grievances, study material, faculty profiles, attendance , leave approval, purchase order, financial settlement, library book issue, staff details, various documentation.ERP(Enterprise resource planning for University / College Automation Software) is a unique and comprehensive automation Software package designed to effectively manage silicon institute at every level. It is a complete suite of applications that** |

empowers us to automate all aspects of Institute management. User can create, manipulate and view relevant data in an efficient and friendly manner and Manage Multiple institute/department from Single Location. The ERP Software is cloud based software . Operational Modules in the ERP: i) Admission Module (From application of students to the institute to SIC number generation) ii) Students profile management( Detail profile of students) iii) Academic Module( Subject registration ,Time Tables, Attendance, Feedback) iv) Exam Module(Exam conduction, Evaluation, Result Publication, Grade sheet Generation) v) Library Management vi) Training Placement vii) Alumni viii) Grievances ix) Finance Management x) Purchase xi) Budget xii) HR Management system xiii) Hostel xiv) Canteen xv) Transport Management

## Part B

## CRITERION I – CURRICULAR ASPECTS

### 1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

| Name of Programme | Programme Code | Programme Specialization | Date of Revision |
|---|---|---|---|
| BTech | UG | Computer science, ECE, , EEE, EIE,EEE, Eand IE | 01/08/2018 |
| Mtech | PG | CSE, EEE, ECE, MCA | 01/08/2018 |
| No file uploaded. | | | |

1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

| Programme with Code | Programme Specialization | Date of Introduction | Course with Code | Date of Introduction |
|---|---|---|---|---|
| BTech | UG | 01/08/2018 | 18HS1L02 | 01/08/2018 |
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### 1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the Academic year

| Programme/Course | Programme Specialization | Dates of Introduction |
|---|---|---|
| BTech | Electronics and Instrumentation Eng in place of Applied Electronics and Instrumentation | 01/08/2018 |
| No file uploaded. | | |

## 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

| Name of programmes adopting CBCS | Programme Specialization | Date of implementation of CBCS/Elective Course System |
| --- | --- | --- |
| BTech | Computer science Engineering,Electronics communication, Electrical Electronics, Electronics I | 01/08/2018 |
| Mtech | Computer science &Engineering, Electrical & Electronics, Electronics & communication, | 01/08/2018 |
| MCA | MCA | 01/08/2018 |

## 1.3 – Curriculum Enrichment

### 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

| Value Added Courses | Date of Introduction | Number of Students Enrolled |
| --- | --- | --- |
| Professional Ethics Human Values | 01/08/2018 | 527 |
| No file uploaded. | | |

### 1.3.2 – Field Projects / Internships under taken during the year

| Project/Programme Title | Programme Specialization | No. of students enrolled for Field Projects / Internships |
| --- | --- | --- |
| BTech | computer science, Electronics, Electrical & Electronics | 215 |
| [View File](#) | | |

## 1.4 – Feedback System

### 1.4.1 – Whether structured feedback received from all the stakeholders.

| | |
| --- | --- |
| Students | Yes |
| Teachers | Yes |
| Employers | Yes |
| Alumni | Yes |
| Parents | Yes |

### 1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

| Feedback Obtained |
| --- |
| Feedback obtained both manually and on line mode. It is analysed with grievances being recorded and discusses in the right forum. Steps are taken for implementation of the recommendations. The institute has a clearly set and defined mechanism of obtaining the feedback from the students to improve the performance and quality of the institutional provisions. Student Feedback is obtained every semester in regard to Faculty, Teaching Learning Process, Course Curriculum. Parent feedback is obtained during the Parents Meet held on second Saturday of September every year. Alumni meet is held every year. Informal |

feedback is obtained from peer institutions and community and the outcomes are used for improvement of the curriculum through Principal and HODs, who in turn present the relevant extracts of the feedback / suggestions before the Academic Council / Board of Studies of the University for possible incorporation / modification of syllabi. The IQAC in the planning process considers feedbacks collected from all the stakeholders to prepare perspectives on development. These developmental perspectives are discussed in the respective meetings of Advisory Board, RC, PT and alumni. The reflections of the meetings are incorporated in the plan. The institution has developed evaluation tools for stakeholders to record their opinions, suggestions and objections for constructive developments for future.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

| Name of the Programme | Programme Specialization | Number of seats available | Number of Application received | Students Enrolled |
| --- | --- | --- | --- | --- |
| Mtech | PG | 54 | 12 | 2 |
| MCA | PG | 60 | 324 | 25 |
| BTech | EEE | 120 | 384 | 107 |
| BTech | EIE | 60 | 82 | 21 |
| BTech | CSE | 180 | 549 | 187 |
| BTech | ECE | 180 | 452 | 174 |
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### 2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

| Year | Number of students enrolled in the institution (UG) | Number of students enrolled in the institution (PG) | Number of fulltime teachers available in the institution teaching only UG courses | Number of fulltime teachers available in the institution teaching only PG courses | Number of teachers teaching both UG and PG courses |
| --- | --- | --- | --- | --- | --- |
| 2018 | 489 | 26 | 126 | 2 | 128 |

### 2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

| Number of Teachers on Roll | Number of teachers using ICT (LMS, e-Resources) | ICT Tools and resources available | Number of ICT enabled Classrooms | Numberof smart classrooms | E-resources and techniques used |
| --- | --- | --- | --- | --- | --- |
| 128 | 32 | 32 | 38 | 8 | 8 |
| View File of ICT Tools and resources | | | | | |
| View File of E-resources and techniques used | | | | | |

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Yes.A group of 30 students is assigned a teacher as the Faculty Adviser. The FA takes feedback from the students regarding their grievances. FA submits monthly report to the H O Ds and the Dean. Report is discussed and corrective measures are taken.Faculty Advisor (Student Mentoring) Shared Vision: To ensure that all students have access to reliable, truthful, valid and one-to-one advising services for academic success over their

period of stay in the Institute. Objectives The primary purpose of academic advising is to assist students in their pursuit of life through the selected educational program, leading them to be well-established in life and prepare them as professionals good human beings in the modern society. Apart from monitoring their academic progress and other related activities, it also includes assisting students: (1) to adopt a healthy and success-oriented academic culture (2) to inculcate a disciplined and professional attitude (3) to understand institutional support services available (4) to understand institutional policies/procedures and abide by the rules regulations (5) to focus on academics and take decisions for academic success career planning, and (6) to overcome their personal problems (if any) and render required support and help. The Faculty Advisor Concept : Conceptually, the role of Faculty Advisor is intended to mentor guide the students for achieving academic success for which they have come to the Institute. In this context, faculty members are required to offer their best efforts in line with the Institute's mission to shape the student's career as well as impart essential life-skills. A group of 15 students are assigned to a selected faculty member, termed as the "Faculty Advisor" of that group, and remains in that role till the student successfully completes his/her course from Silicon. A Faculty Advisor is expected to closely interact with each student in the group primarily in a one-to-one manner, establish a trusting relationship with them and be in touch with their parents. In a way, the Faculty Advisor is envisioned to assume the role of a Social Parent, keep track of their day to day activities (including monitoring, mentoring, and facilitating academic co-curricular progress), extend a helping hand whenever required, and acts as a vital bridge between the parents and the Institute. Furthermore, a Faculty Advisor would also provide necessary motivation, encouragement, moral support, and primary counselling to the students to help them prepare for a successful professional career. Assuming the role of a Social Parent however does not authorize a Faculty Advisor to intentionally or unintentionally invade into their family aspects, religious/cultural values practices, relationships and personal lives in general. However, if anything is of a damaging nature or likely to damage the academic performance of a student as per the observations of the Faculty Advisor, he/she may express concern, discuss personally, advise and sensitize the student and/or bring the same to the knowledge of the parents, if required, depending on the outcomes of the advice.

| Number of students enrolled in the institution | Number of fulltime teachers | Mentor : Mentee Ratio |
| :---: | :---: | :---: |
| **2208** | **128** | **1:17** |

## 2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

| No. of sanctioned positions | No. of filled positions | Vacant positions | Positions filled during the current year | No. of faculty with Ph.D |
| :---: | :---: | :---: | :---: | :---: |
| **132** | **128** | **4** | **4** | **35** |

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

| Year of Award | Name of full time teachers receiving awards from state level, national level, international level | Designation | Name of the award, fellowship, received from Government or recognized bodies |
| :---: | :---: | :---: | :---: |
| **2019** | **Mrs. Manorama Swain** | **Assistant Professor** | **ISTE State level Best Teacher Award** |
| **2018** | **Dr.Bimal Prasad Meher** | **Associate Professor** | **Best Thesis Award by CSI** |
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## 2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

| Programme Name | Programme Code | Semester/ year | Last date of the last semester-end/ year-end examination | Date of declaration of results of semester-end/ year- end examination |
| :---: | :---: | :---: | :---: | :---: |
| | | | | |

| BTech | UG | 8 | 30/03/2019 | 14/06/2019 |
|-------|-----|---|------------|------------|
| BTech | UG | 6 | 12/04/2019 | 26/07/2019 |
| BTech | UG | 4 | 04/05/2019 | 03/08/2019 |
| BTech | UG | 2 | 04/05/2019 | 17/06/2019 |
| MCA | PG | 6 | 12/04/2019 | 26/07/2019 |
| MCA | PG | 4 | 04/05/2019 | 03/08/2019 |
| MCA | PG | 3 | 04/05/2019 | 17/06/2019 |
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2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

| Number of complaints or grievances about evaluation | Total number of students appeared in the examination | Percentage |
|-----|-----|-----|
| 135 | 2100 | 7 |

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://silicon.ac.in/bbsr-home/b-tech-computer-science-engineering/

2.6.2 – Pass percentage of students

| Programme Code | Programme Name | Programme Specialization | Number of students appeared in the final year examination | Number of students passed in final year examination | Pass Percentage |
|-----|-----|-----|-----|-----|-----|
| UG | BTech | Computer science | 116 | 111 | 96 |
| UG | BTech | Electronics & Communication | 169 | 149 | 89 |
| UG | BTech | Electrical& Electronics | 121 | 107 | 89 |
| UG | BTech | Applied instrumentation | 47 | 40 | 85 |
| PG | MCA | MCA | 51 | 49 | 96 |
| UG | BTech | IT | 53 | 48 | 91 |
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## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

http://www.silicon.ac.in

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 – Promotion of Research and Facilities

3.1.1 – The institution provides seed money to its teachers for research

| Yes |
| :---: |
| Name of the teacher getting seed money |
| Dr. A.G Mohapatra |
| [View File](#) |

3.1.2 – Teachers awarded National/International fellowship for advanced studies/ research during the year

| Type | Name of the teacher awarded the fellowship | Name of the award | Date of award | Awarding agency |
| :---: | :---: | :---: | :---: | :---: |
| National | Nill | Nill | Nill | Nill |

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## 3.2 – Resource Mobilization for Research

3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

| Nature of the Project | Duration | Name of the funding agency | Total grant sanctioned | Amount received during the year |
| :---: | :---: | :---: | :---: | :---: |
| Major Projects | 1095 | DST, G O I | 1700000 | 1000000 |
| Major Projects | 1095 | SERB | 1000000 | 275000 |

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3.2.2 – Number of ongoing research projects per teacher funded by government and non-government agencies during the years

| 2 |
| :---: |

## 3.3 – Innovation Ecosystem

3.3.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

| Title of workshop/seminar | Name of the Dept. | Date |
| :---: | :---: | :---: |
| IPand technological innovations and transfer under Make in india and start up india | IQAC | 13/08/2019 |
| IOT Workshop | CSE with Lecture Notes Ltd | 04/09/2018 |
| IOT with Raspbherry Pi | ISTE Students chapter | 02/02/2019 |
| Importance of Patents | ED Cell | 10/01/2019 |

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3.3.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

| Title of the innovation | Name of Awardee | Awarding Agency | Date of award | Category |
| :---: | :---: | :---: | :---: | :---: |

| Dev of innovativesafety measure for two wheelers | Prashant Ranjan | TATA Crucible 2019 | 20/02/2019 | INNOVATIONS |
|---|---|---|---|---|
| Smart solution for drainage system | swagat Kumar Sahu | Smart Odisha Hackathon 2018 | 15/11/2018 | Urban planning |
| cost effective innovation for agricultural use | Manidipa Ghosh | Smart India Hackathon | 22/06/2018 | Smart innovation |
| Idea Generation Competition | Institution Innovation Cell | MHRD, New Delhi | 21/11/2018 | Idea Generation |

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3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year

| Incubation Center | Name | Sponsored By | Name of the Start-up | Nature of Start-up | Date of Commencement |
|---|---|---|---|---|---|
| Incubation | Silicon Innovation and Incubation center | MSME, G O I | VLSI | Smart Chip | 15/01/2019 |
| Incubation | Silicon Innovation and Incubation center | M S M E, G O I | I O T | Innovation | 21/12/2018 |

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## 3.4 – Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

| Name of the Department | Number of PhD's Awarded |
|---|---|
| Computer Science and Engineering | 2 |

3.4.2 – Research Publications in the Journals notified on UGC website during the year

| Type | Department | Number of Publication | Average Impact Factor (if any) |
|---|---|---|---|
| International | computer science and Eng | 2 | 3.5 |
| International | Electronics and Comm.Eng | 2 | 3 |
| National | Computer science and Eng | 14 | 2.5 |
| National | Electronics and Instrumentation | 6 | 2 |
| National | Electronics and Comm.Eng | 11 | 2 |

| National | Basic science and Humanities | 12 | 1.5 |
|----------|------------------------------|----|----|
| National | MCA | 6 | 1 |

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3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

| Department | Number of Publication |
|------------|------------------------|
| Electronics Instrumentation | 4 |
| Electrical Electronics | 2 |
| MCA | 3 |
| Electronics Comm. | 9 |
| Basic science Humanities | 7 |
| Computer science | 3 |

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3.4.4 – Patents published/awarded during the year

| Patent Details | Patent status | Patent Number | Date of Award |
|----------------|---------------|---------------|---------------|
| 00 | Nill | 0 | Nill |

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3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

| Title of the Paper | Name of Author | Title of journal | Year of publication | Citation Index | Institutional affiliation as mentioned in the publication | Number of citations excluding self citation |
|--------------------|----------------|------------------|---------------------|----------------|-----------------------------------------------------------|---------------------------------------------|
| Stress-Induced Variability Studies in Tri-Gate FinFETs with Source/Drain Stressor at 7 nm Technology Nodes | S Das | Journal of Electronic Materials | 2019 | 5 | SIT,Bhubaneswar | 1 |
| Estimating Stock Closing Indices Using a GA-Weighted Condensed Polynomial Neural Network | B B Mishra | Financial Innovation | 2018 | 28 | SIT, Bhubaneswar | 25 |

[View File](#)

3.4.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

| Title of the Paper | Name of Author | Title of journal | Year of publication | h-index | Number of citations excluding self citation | Institutional affiliation as mentioned in the publication |
|---|---|---|---|---|---|---|
| Automated approach for detection of ischemic stroke using Delaunay Triangulation in brain MRI images | M Dash | Computers in Biology and Medicine | 2018 | 94 | 14 | SIT,Bhubaneswar |
| Electro-osmotic flow of a third-grade fluid past a channel having stretching walls | S Padhi | Nonlinear Engineering | 2019 | 15 | 8 | SIT,Bhubaneswar |
| View File | | | | | | |

3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

| Number of Faculty | International | National | State | Local |
|---|---|---|---|---|
| Attended/Seminars/Workshops | 8 | 53 | 22 | 5 |
| Presented papers | 24 | 2 | 2 | 2 |
| Resource persons | 0 | 7 | 8 | 11 |
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## 3.5 – Consultancy

3.5.1 – Revenue generated from Consultancy during the year

| Name of the Consultan(s) department | Name of consultancy project | Consulting/Sponsoring Agency | Revenue generated (amount in rupees) |
|---|---|---|---|
| EEE(Prof.R P Panda) | Integrated Network Planning and system study for Mega Lift Irrigation project cluster X | SaiSanket enterprisers, Hyderabad | 140000 |
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## 3.5.2 – Revenue generated from Corporate Training by the institution during the year

| Name of the Consultan(s) department | Title of the programme | Agency seeking / training | Revenue generated (amount in rupees) | Number of trainees |
|---|---|---|---|---|
| 00 | 0 | 0 | 0 | 0 |

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## 3.6 – Extension Activities

### 3.6.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

| Title of the activities | Organising unit/agency/ collaborating agency | Number of teachers participated in such activities | Number of students participated in such activities |
|---|---|---|---|
| 11th Odisha Deaf senior sports championship | Sports cell, SIT | 11 | 200 |
| Cleaning Drive | Bhubaneswar Municipal corp. | 14 | 287 |
| Blood Donation | Red Cross | 12 | 45 |

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### 3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

| Name of the activity | Award/Recognition | Awarding Bodies | Number of students Benefited |
|---|---|---|---|
| 0 | 00 | 0 | 0 |

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### 3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

| Name of the scheme | Organising unit/Agency/collaborating agency | Name of the activity | Number of teachers participated in such activites | Number of students participated in such activites |
|---|---|---|---|---|
| Awareness | BMC | Gender EqualityAwareness | 8 | 49 |
| Swachhta Pakhwada | Silicon Students Council and Campus-life Coordination Committee (CCC). | Cleanliness12 | 12 | 122 |

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## 3.7 – Collaborations

### 3.7.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

| Nature of activity | Participant | Source of financial support | Duration |
|---|---|---|---|
| Research | 01 | SERB | 60 |

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**3.7.2** – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

| Nature of linkage | Title of the linkage | Name of the partnering institution/ industry /research lab with contact details | Duration From | Duration To | Participant |
|---|---|---|---|---|---|
| 00 | 0 | 0 | Nill | Nill | 0 |

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**3.7.3** – MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

| Organisation | Date of MoU signed | Purpose/Activities | Number of students/teachers participated under MoUs |
|---|---|---|---|
| Institute of Engineers | 25/06/2019 | collaboration in training and research | 5 |

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# CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

## 4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

| Budget allocated for infrastructure augmentation | Budget utilized for infrastructure development |
|---|---|
| 1553.84 | 459.19 |

4.1.2 – Details of augmentation in infrastructure facilities during the year

| Facilities | Existing or Newly Added |
|---|---|
| Others | Newly Added |
| Video Centre | Newly Added |
| Seminar halls with ICT facilities | Newly Added |
| Classrooms with LCD facilities | Newly Added |
| Laboratories | Existing |

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## 4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

| Name of the ILMS software | Nature of automation (fully or patially) | Version | Year of automation |
|---|---|---|---|
| SILICON ERP | Fully | 2.0 | 2014 |

4.2.2 – Library Services

| Library Service Type | Existing | | Newly Added | | Total | |
|---|---|---|---|---|---|---|
| Text Books | 8841 | 37722 | 455 | 665 | 9296 | 38387 |

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## 4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives &amp; institutional (Learning Management System (LMS) etc

| Name of the Teacher | Name of the Module | Platform on which module is developed | Date of launching e-content |
|---|---|---|---|
| Dr. J.P.Mohanti | Automata Theory, Algorithm, DBMS, OOPS, Graphics | LMS, Lecturenotes | 12/08/2019 |
| Dr. J.Senapati | E DP | LMS, | 14/03/2019 |
| Dr. B. Padhi | Accounting and Costing | LMS | 11/12/2018 |
| Dr. P.K Tripathy | CAO | Lecturenotes | 24/04/2019 |
| Mr. G.R.Biswal | Electrical Machines | Youtube | 17/06/2019 |
| Dr. S.S.Rout | Software Engineering | Lecturenotes | 21/01/2019 |
| No file uploaded. | | | |

## 4.3 – IT Infrastructure

### 4.3.1 – Technology Upgradation (overall)

| Type | Total Computers | Computer Lab | Internet | Browsing centers | Computer Centers | Office | Departments | Available Bandwidth (MBPS/ GBPS) | Others |
|---|---|---|---|---|---|---|---|---|---|
| Existing | 798 | 435 | 54 | 0 | 10 | 54 | 245 | 150 | 0 |
| Added | 42 | 22 | 5 | 0 | 0 | 5 | 10 | 55 | 0 |
| Total | 840 | 457 | 59 | 0 | 10 | 59 | 255 | 205 | 0 |

### 4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

| 205 MBPS/ GBPS |
|---|

### 4.3.3 – Facility for e-content

| Name of the e-content development facility | Provide the link of the videos and media centre and recording facility |
|---|---|
| Study Materials | https://www.silicon.ac.in |

## 4.4 – Maintenance of Campus Infrastructure

### 4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

| Assigned Budget on academic facilities | Expenditure incurred on maintenance of academic facilities | Assigned budget on physical facilities | Expenditure incurredon maintenance of physical facilites |
|---|---|---|---|
| 451.17 | 333.94 | 495.97 | 302.63 |

### 4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website)

An administrative set up is in place with a senior faculty as the H O D establishment. He is the budgetary and monitoring head of the maintenance part

supported by a civil engineer, an electrical engineer along with a no of supporting staffs. Construction part is fully looked after by a site engineer with a lot of ground staffs and supervisors. There is a Dean( Administration) looking after the general academic and general administration. Our system is having a senior faculty in charge of sports/ music clubs. Enough lab staffs are there for lab maintenance with a faculty as Lab coordinator. Various support facilities are well maintained with regular supervision and up gradation.Hostel administration is well maintained by a good no of support staffs with a warden . A hostel committee is in place for both boys and girls with faculty and student members.The entire functioning of the Institute is divided into three areas, viz., teaching, research and nonteaching, for administrative purposes. Accordingly, to facilitate smooth administration of the Institution following authorities help Principal carry out the responsibilities 1. Dean (Academics) will co-ordinate between the teaching departments and all activities involving teaching, viz., teaching, examinations, timetable etc. 2. Dean (Research) will co-ordinate all research and research related activities. 3. Dean (Administration) will co-ordinate all other activities. 4. Each department shall have a Head who shall be designated from among Its members, on the recommendation of the Director. 5. The Deans and the departmental Heads shall be responsible to the Director for the proper working of their respective Departments. The system of governance makes provision for the consideration of faculty, student, and employee views and judgments in those matters In which these constituencies have a direct and reasonable Interest. The System's policies, regulations, and procedures concerning the Institute are clearly defined and equitably administered. In addition to the principal bodies stated earlier, the college has the following support Committees/Cells to facilitate smooth functioning of the college: 1. Internal Quality Assurance Cell (IQAC) 2. Cell for Statutory Bodies 3. Disciplinary Committee 4. Grievance Committee 5. Committee Against Sexual Harassment (CASH) 6. Anti ragging committee 7. Anti ragging Squad 8. Examination Cell 9. Establishment Cell 10. Library Cell 11. Cell for ERP Academics 12. Staff Welfare Cell 13. Residence Cell 14. Student Council Cell 15. Sports Culture Cell 16. Accounts Cell 17. Purchase Cell 18. Transport Cell 19. Publication Cell 20. Industry Interface Cell The aforesaid Committees / Cells help in decentralised smooth functioning of the Institution. Rules, Regulations and Policies: Silicon Institute of Technology has well defined Rules, Regulations and Policies governing academic administrative functioning of the Institution that includes Student Handbook, Service Rules, Recruitment Policies, Staff Appraisal and Development Pi Promotional Policies etc. These Rules, Regulations and Policies are available online in the Institutional ERP system for awareness of Student and Staff. Decentralization in working and grlevance redressal mechanism .

http://www.silicon.ac.in

# CRITERION V – STUDENT SUPPORT AND PROGRESSION

## 5.1 – Student Support

### 5.1.1 – Scholarships and Financial Support

|  | Name/Title of the scheme | Number of students | Amount in Rupees |
|---|---|---|---|
| Financial Support from institution | Silicon merit, Silicon Employee | 28 | 336000 |
| Financial Support from Other Sources |  |  |  |
| a) National | Govt merit, Medhabruti | 227 | 4592000 |
| b)International | Nill | Nill | Nill |

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

| Name of the capability enhancement scheme | Date of implemetation | Number of students enrolled | Agencies involved |
| --- | --- | --- | --- |
| Entrepreneurship Awareness Camp | 11/01/2019 | 125 | NSTEDB, Govt of India |
| Entrepreneurship Awreness Camp | 24/09/2018 | 150 | NSTEDB, Govt of India |
| IoT with Raspberry pi | 02/02/2019 | 40 | IEEE |
| Meditation | 17/01/2019 | 120 | Yoga Club |
| Language Lab | 22/03/2019 | 219 | Globarena |

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

| Year | Name of the scheme | Number of benefited students for competitive examination | Number of benefited students by career counseling activities | Number of students who have passedin the comp. exam | Number of studentsp placed |
| --- | --- | --- | --- | --- | --- |
| 2018 | Pre placement Training, Career counselling | 21 | 124 | 11 | 432 |
| 2019 | Pre placement Training, Career counselling | 12 | 120 | 17 | 452 |

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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

| Total grievances received | Number of grievances redressed | Avg. number of days for grievance redressal |
| --- | --- | --- |
| 4 | 4 | 12 |

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

| On campus | | | Off campus | | |
| --- | --- | --- | --- | --- | --- |
| Nameof organizations visited | Number of students participated | Number of stduents placed | Nameof organizations visited | Number of students participated | Number of stduents placed |
| 21 | 562 | 338 | 9 | 124 | 98 |

## 5.2.2 – Student progression to higher education in percentage during the year

| Year | Number of students enrolling into higher education | Programme graduated from | Depratment graduated from | Name of institution joined | Name of programme admitted to |
|---|---|---|---|---|---|
| 2019 | 2 | B tech | CSE, ECE | NIT, Rourlela | Mtech |
| 2019 | 3 | B Tech | CSE, EEE | KIIT | Mtech |
| 2018 | 5 | B Tech | ECE, CSE | Xavier Institute Of Management, BBSR | MBA |

**No file uploaded.**

## 5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

| Items | Number of students selected/ qualifying |
|---|---|
| GATE | 12 |
| CAT | 10 |
| Any Other | 8 |

**No file uploaded.**

## 5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

| Activity | Level | Number of Participants |
|---|---|---|
| Cricket Tournament | University | 28 |
| Inter college volleyball | University | 30 |
| Inter college Table Tennis | University | 11 |

**No file uploaded.**

## 5.3 – Student Participation and Activities

### 5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

| Year | Name of the award/medal | National/ Internaional | Number of awards for Sports | Number of awards for Cultural | Student ID number | Name of the student |
|---|---|---|---|---|---|---|
| 2018 | English Elocution | National | Nill | 1 | 2017 EEE | Sanath Kumar Swain |
| 2018 | English Elocution | National | Nill | 1 | 2018 CSE | Swaraj Baral |
| 2018 | Hindi Elocution | National | Nill | 1 | 2017 ECE | Shweta Santoshi |

**No file uploaded.**

### 5.3.2 – Activity of Student Council &amp; representation of students on academic &amp; administrative bodies/committees of the institution (maximum 500 words)

Student council is an elected body of students drawn from each section or

group, Only students with good attendance, performance is eligible for standing as a member. The selected representatives choose one as the Secretary General.Silicon student council takes the charge of maintaining good atmosphere, discipline of the institute. The SG is the member of the disciplinary committee, IQAC,and some other decision making body. Student representatives from student council are the members of Canteen committee, Residence committee, Cultural and sports committee. The annual function is fully organised by the council.It conducts the Annual Tech Fest, Cultural Night, various other meets such as Induction Programme for new students, The anti ragging committee, anti ragging squad , do have active student members. The grievance readdressal committee is having student members.Charter of Silicon Students' Council OVERVIEW: Silicon Students' Council (SSC) is the student body representing students' interest and engagement in achieving a common goal of becoming a leading center of excellence. It was established in 2005 and has been actively involved itself in building student leadership in pursuit of technical events and humanitarian causes. The council is a representative structure, led by the Secretary General and its eminent office bearers which comprise of Core Team, Secretary Academics and Amenities. OBJECTIVES: SSC supports students in getting them involved in various activities, brainstorming for improved solutions for concerns, involving them in leadership and team activities to learn all aspects of a professional and promote holistic development in students. They assist and facilitate in the affairs of the Institute, working in partnership with various Clubs, Cells and Committees. SPECIFIC GOALS: To encourage democracy, team work, ideas and innovation, education and leadership COUNCIL FORMATION: The formation of the Council is an annual process of nominations and election from the present student base of the Institution. Selection of the Secretary General, their Core Team, Joint Secretaries and Activity Coordinators are done during the annual process. The tenure of each council is limited to one academic session, after which the term automatically stands concluded. THE ADVISORY COMMITTEE: The Advisory Committee comprises the Director and Dean (estb.) with the overall process being reviewed by Faculty in Charge (FIC). The committee is further assisted by Faculty coordinators and SPOCs of different Clubs, Cells and Committees functional in the Institute. POSTS IN THE COUNCIL: • Secretary General• Core Team Members• Secretary Academics • Secretary Amenities• Joint Secretary Academics • Joint Secretary Amenities• Activity Coordinators The Silicon Students' Council is committed to deliver their responsibility towards the students' interests in the Academics and Co? Curricular Activities. The major activities taken up by the Council are as follows: • Annual Function • Annual Sports • Annual Technical Fest • Blood donation Camp • Green Campus Besides the main events, the Council supports in organizing the events of the other departments including, Academics, Placement, Music Club, Residence Committee, and Admission Office as and when scheduled, through the help of the Activity Coordinators for the respective Department of the Institution.

## 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

Our first Alumni Meet was held at Mumbai on the 25th March 2006. A proud set of 30 members joined hands to share their views and dreams of thinking big and beyond. Registered in the year 2008 Silicon Alumni Association (SAA) is now a body, keen to take charge as Office Bearers and bring Academics closer to Industry and Research and build a family prosperous and humane, noble and contributing to the humankind in a larger way!Vision: To become a center of excellence in the fields of technical education research and create responsible citizens. Mission: To provide the best of technical skills, professional ethics, and human values in enriching the disciplines of Science, Engineering

| 5.4.2 – No. of registered Alumni: |
|---|

| 1018 |
|---|

5.4.3 – Alumni contribution during the year (in Rupees) :

| 200000 |
|---|

5.4.4 – Meetings/activities organized by Alumni Association :

Annual meet, Organised talk, Participation in various extensive activities, The 10th Alumni Meet was organized on 28th December 2017 inside the campus. There were 214 alumni members from different passing out batches attended the meet. Dr. Jaideep Talukdar (Principal) delivered the welcome address. A small cultural program and other entertainment programs were organized in the evening

## CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

1-Participation of members and staffs of a department in the decision making process. 2-Discussion on various staff grievance and other issues in the monthly quality circle meeting and the decisions conveyed to the institutional decision making bodies.The quest for good technical education with a social look and human value 2- Participatory management and work culture Over a period of 18 years, Silicon has evolved a series of best practices that has helped it to emerge as a centre of excellence. Some of them are: 1. Effective pedagogy and student-centric learning by self and ICT based learning. 2. Secular campus with no religious bias. 3. Seminars by senior faculty members and industry experts. 4. Training of students for placement examination and interview. 5. Institution e-mail ID for every staff student. 6. Special classes for academically slow learners. 7. Chamber consultancy/assistance available to students. 8. Standard guidelines for faculty members to prepare lesson plans, model answers and course handouts. 9. In-house projects under the guidance of faculty members. Many of these projects have won prizes in various competitions. 10. Infosys "Campus Connect" programme for selected students 11. The annual function and tech fest for all round development of the students 12. A student council works for the social cause and betterment of students 13. Best Student award of the year 14. Communicative English programme to strengthen the communication skills of the student. 15. Heads conduct regular monitoring of the syllabi coverage by the faculty members. 16. Detailed supplementary courseware files prepared to augment the course syllabus. 17. Thrust given to ICT enabled courses and ICT competency. 18. Knowledge communication centre to provide research and learning. 19. Open House Science programme. 20. In-house documentation centre. 21. Industry-Silicon interaction activities are promoted. 22. Innovation and Incubation facilities for students. 23. Entrepreneurship awareness and development programmes for students on regular basis 24. Efficient ERP system manages all academic and administrative activities. 25. Top-ranked Institute Innovation Cell (IIC) encourages and monitors Institute research and entrepreneurship activities. 26. Seed money given to faculty members to encourage inter-disciplinary research, culminating in external funding 27. Several active MoUs in place with with leading government and private organizations, in both academia and industry. Silicon Incubation Centre Silicon's incubation center is a place to build future entrepreneurs mainly from Silicon faculties and students and see them realize their dreams. The focus areas are: • Entrepreneurship Development • Building Industry-Student and Industry-Faculty Relationships • Building Industry Focused

Technology Value Stream • Employment Generation • Enable Automation in the Local Market Examination Process in Silicon • Dedicated examination halls with CCTV surveillance • Fair, strict, and streamlined Examination • Transparent and continuous evaluation • ERP enabled question setting, Quiz, Exam Scheduling and Processing • Online evaluation, mark submission and result processing • Most trusted examination centre of BPUT • Facilities for National level competitive examinations (both online and offline The Approach to Curriculum for UG Degree Programs needs to lay special emphasis on educating.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

| Strategy Type | Details |
|---|---|
| Admission of Students | Transparent process of admission |
| Industry Interaction / Collaboration | Proper utilization of various collaboration and industrial linkage |
| Human Resource Management | Proper use of human resources in various strategic role |
| Library, ICT and Physical Infrastructure / Instrumentation | Emphasis on e resources and effective use of ICT and other facilities. |
| Research and Development | Thrust on interdisciplinary research and focus on emerging areas. |
| Examination and Evaluation | Transparency in examination and evaluation process which is mostly done on line with various level of moderation, change in question set up. |
| Teaching and Learning | Use of ICT and other e resources for improving class room teaching and learning. |
| Curriculum Development | Participation of all faculty in the curriculum revision once in 2 years under the Autonomous system. |

6.2.2 – Implementation of e-governance in areas of operations:

| E-governace area | Details |
|---|---|
| Administration | Administration fully managed by the ERP system with help of various modules designed in an effective way |
| Finance and Accounts | ERP modules include budget making, approval, execution of various work order, order execution, auditing, salary disburshment |
| Student Admission and Support | Admission, unique id creation,hostel admission, fee collection, recording of grievance, leave approval |
| Examination | Examination erp module includes notification of schedule, question set up, moderation, answer sheet ,admit card, seating arrangement generation, |

| | |
|---|---|
| | evaluation.result publish, re examination, grade sheet generation |
| Planning and Development | mostly executed by the ERP system in a systematic and transparent way |

## 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

| Year | Name of Teacher | Name of conference/ workshop attended for which financial support provided | Name of the professional body for which membership fee is provided | Amount of support |
|---|---|---|---|---|
| 2018 | Siba Sankar Nayak | National seminar on Future India, Science Technology | Association of Chemistry Teachers | 1000 |
| View File | | | | |

6.3.2 – Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

| Year | Title of the professional development programme organised for teaching staff | Title of the administrative training programme organised for non-teaching staff | From date | To Date | Number of participants (Teaching staff) | Number of participants (non-teaching staff) |
|---|---|---|---|---|---|---|
| 2019 | Language skill for Leadership Management | Language Training | 26/04/2019 | 27/04/2019 | 24 | 8 |
| 2018 | Leadership Quality En hancement | Leadership Quality En hancement | 21/12/2018 | 22/12/2018 | 21 | 4 |
| No file uploaded. | | | | | | |

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

| Title of the professional development programme | Number of teachers who attended | From Date | To date | Duration |
|---|---|---|---|---|
| Web Application Deveplopment | 28 | 01/09/2018 | 08/09/2018 | 8 |
| Imtroduction to Robotics | 35 | 18/01/2019 | 19/01/2019 | 02 |
| Internet of Things | 56 | 26/10/2018 | 03/11/2018 | 8 |
| Public policy Research | 23 | 27/06/2019 | 27/06/2019 | 01 |

| Initiaves | | | | |
| --- | --- | --- | --- | --- |
| Importance of thinking big in life | 42 | 18/12/2018 | 18/12/2018 | 01 |
| Induction programme for students | 2 | 06/07/2018 | 08/07/2018 | 03 |
| Faculty Developement programme | 47 | 08/07/2019 | 13/07/2019 | 06 |

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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

| Teaching | | Non-teaching | |
| --- | --- | --- | --- |
| Permanent | Full Time | Permanent | Full Time |
| 6 | 6 | 11 | 11 |

6.3.5 – Welfare schemes for

| Teaching | Non-teaching | Students |
| --- | --- | --- |
| GHI, EPF, Own your vehicle, home | ESI,Own your Vehicle scheme, Own your Home, EPF | scholarship( Silicon Merit, Silicon Employee) |

## 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

**Mostly conducted by a firm which is submitted to various agencies like I T dept, banks. Internal audit is mostly done by the finance committee as per UGC notification.It is conducted in a transparent way and submitted to various approval and accreditating agencies.It is uploaded in the institution website for transparency.**

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

| Name of the non government funding agencies /individuals | Funds/ Grnats received in Rs. | Purpose |
| --- | --- | --- |
| 00 | 0 | 00 |

<div align="center"><strong>No file uploaded.</strong></div>

6.4.3 – Total corpus fund generated

<div align="center">70000000</div>

## 6.5 – Internal Quality Assurance System

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

| Audit Type | External | | Internal | |
| --- | --- | --- | --- | --- |
| | Yes/No | Agency | Yes/No | Authority |
| Academic | Yes | Parent University, IQAC( BY AN EXTERNAL EXPERT)T) | Yes | Internal Audit Team appointed by IQAC |

| Administrative | Yes | Parent University, IQAC( By an external expert) | Yes | Internal Audit Team appointed by IQAC |
|---|---|---|---|---|

### 6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

.1- Suggestions from parents are given top priority while implementing policy 2-Constructive suggestions are considered and put before IQAC and other committee meetings. 3- Efforts are taken to get active support from parents from their field of expertise.

### 6.5.3 – Development programmes for support staff (at least three)

1- More coverage under ESI scheme 2-Proposal under active consideration for some retirement benefit like gratuity 3- Focus on some work related incentives during service

### 6.5.4 – Post Accreditation initiative(s) (mention at least three)

1- Improvement in teaching learning by adopting different methodology looking at the intake of students. 2- Upgrade various quality parameters for getting NBA accreditation for 6 yrs. 3- Attracting students for the PG program with more thrust on research based curriculum and their placement aspects.

### 6.5.5 – Internal Quality Assurance System Details

| a) Submission of Data for AISHE portal | Yes |
|---|---|
| b)Participation in NIRF | Yes |
| c)ISO certification | No |
| d)NBA or any other quality audit | Yes |

### 6.5.6 – Number of Quality Initiatives undertaken during the year

| Year | Name of quality initiative by IQAC | Date of conducting IQAC | Duration From | Duration To | Number of participants |
|---|---|---|---|---|---|
| 2018 | Process of Accreditation and Assessment | 05/02/2018 | 05/02/2018 | 06/02/2018 | 42 |
| 2019 | Role of Teachers towards Autonomy | 14/05/2019 | 14/05/2019 | 15/05/2019 | 32 |
| No file uploaded. | | | | | |

## CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

| Title of the programme | Period from | Period To | Number of Participants | |
|---|---|---|---|---|
| | | | Female | Male |
| Gender Equality | 08/03/2019 | 08/03/2019 | 47 | 25 |

## 7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

| Percentage of power requirement of the University met by the renewable energy sources |
|---|
| Use of alternative source of energy like solar power, cleanliness drive, campus connect programme, plantation drive, Energy audit annually by Green Club |

## 7.1.3 – Differently abled (Divyangjan) friendliness

| Item facilities | Yes/No | Number of beneficiaries |
|---|---|---|
| Physical facilities | Yes | 2 |
| Provision for lift | Yes | 4 |
| Rest Rooms | Yes | 11 |
| Special skill development for differently abled students | Yes | 2 |

## 7.1.4 – Inclusion and Situatedness

| Year | Number of initiatives to address locational advantages and disadvantages | Number of initiatives taken to engage with and contribute to local community | Date | Duration | Name of initiative | Issues addressed | Number of participating students and staff |
|---|---|---|---|---|---|---|---|
| 2018 | 1 | 1 | 22/11/2018 | 01 | Cleanliness drive | Awareness | 24 |
| 2019 | 1 | 1 | 17/10/2019 | 01 | computer literacy | Education | 35 |
| No file uploaded. | | | | | | | |

## 7.1.5 – Human Values and Professional Ethics

| Title | Date of publication | Follow up(max 100 words) |
|---|---|---|
| No Data Entered/Not Applicable !!! | | |

## 7.1.6 – Activities conducted for promotion of universal Values and Ethics

| Activity | Duration From | Duration To | Number of participants |
|---|---|---|---|
| Ethics in work culture | 10/05/2019 | 10/05/2019 | 125 |
| Life skill for professionals | 05/01/2020 | 05/01/2020 | 52 |
| No file uploaded. | | | |

## 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

| |
|---|
| LED lights, plantation drive, waste management, Green club with environmental awareness campaign, regular energy audits, installation of roof top solar cells |

## 7.2 – Best Practices

### 7.2.1 – Describe at least two institutional best practices

1-The quest for good technical education with a social look and human value 2-Participatory management and work culture Over a period of 18 years, Silicon has evolved a series of best practices that has helped it to emerge as a centre of excellence. Some of them are: 1. Effective pedagogy and student-centric learning by self and ICT based learning. 2. Secular campus with no religious bias. 3. Seminars by senior faculty members and industry experts. 4. Training of students for placement examination and interview. 5. Institution e-mail ID for every staff student. 6. Special classes for academically slow learners. 7. Chamber consultancy/assistance available to students. 8. Standard guidelines for faculty members to prepare lesson plans, model answers and course handouts. 9. In-house projects under the guidance of faculty members. Many of these projects have won prizes in various competitions. 10. Infosys "Campus Connect" programme for selected students 11. The annual function and tech fest for all round development of the students 12. A student council works for the social cause and betterment of students 13. Best Student award of the year 14. Communicative English programme to strengthen the communication skills of the student. 15. Heads conduct regular monitoring of the syllabi coverage by the faculty members. 16. Detailed supplementary courseware files prepared to augment the course syllabus. 17. Thrust given to ICT enabled courses and ICT competency. 18. Knowledge communication centre to provide research and learning. 19. Open House Science programme. 20. In-house documentation centre. 21. Industry-Silicon interaction activities are promoted. 22. Innovation and Incubation facilities for students. 23. Entrepreneurship awareness and development programmes for students on regular basis 24. Efficient ERP system manages all academic and administrative activities. 25. Top-ranked Institute Innovation Cell (IIC) encourages and monitors Institute research and entrepreneurship activities. 26. Seed money given to faculty members to encourage inter-disciplinary research, culminating in external funding 27. Several active MoUs in place with with leading government and private organizations, in both academia and industry. Silicon Incubation Centre Silicon's incubation center is a place to build future entrepreneurs mainly from Silicon faculties and students and see them realize their dreams. The focus areas are: • Entrepreneurship Development • Building Industry-Student and Industry-Faculty Relationships • Building Industry Focused Technology Value Stream • Employment Generation • Enable Automation in the Local Market Examination Process in Silicon • Dedicated examination halls with CCTV surveillance • Fair, strict, and streamlined Examination • Transparent and continuous evaluation • ERP enabled question setting, Quiz, Exam Scheduling and Processing • Online evaluation, mark submission and result processing • Most trusted examination centre of BPUT • Facilities for National level competitive examinations (both online and offline The Approach to Curriculum for UG Degree Programs needs to lay special emphasis on educating/preparing the students well for being able to demonstrate the following abilities: (a) Effective application of knowledge of mathematics, science and technical subjects (b) Planning and design to conduct scientific and technical experiments (c) Analysis and interpretation of scientific, technical and economic data collected (d) Design of parts, subsystems, systems and/or processes to meet specific needs (e) Identification, formulation and solving of problems using simulation or otherwise (f) Use of techniques/tools including software in all disciplines, as may be required (g) Effective communication skills and leadership/participation in team work (h) Fulfillment of professional, social and ethical responsibilities (i) Sensitivity to environmental and energy issues and concerns (j) Planning, development and implementation of strategies for life-long learning. 2. Preparation: To prepare the students to excel in various educational programs or to succeed in industry / technical profession through further education/training 3. Core Competence: To provide the students with a solid foundation in mathematical, scientific and fundamentals required to solve related problems, keeping in line with the global emphasis on STEM (Science,

Technology, Engineering, and Mathematics). 4. Breadth: To train the students with a breadth of scientific and knowledge to comprehend, analyze, design and create novel products and solutions for real life problems. 5. Professionalism: To inculcate in the students professional/ethical attitude, effective team work skills, multidisciplinary approach and to relate issues to a broader context. 6. Learning Environment: To provide the students with academic environment of excellence, leadership, ethical guidelines and life-long learning needed for a long/productive career. Curriculum Structure • The college has a well-developed action plan for effective implementation of curriculum by making mandatory provision of developing and upgrading the Course File and Lesson Plan. The curriculum is geared to facilitate entry to further higher education as well as employment and self-employment. • Though all the programmes of study at both UG PG are self-financing, the Institution is conducting value added / add-on programmes for the benefit of students. • ICT enabled teaching learning methods are in implementation in the institution with more courses added every year. Guest faculty members / Experts from Industry in relevant subjects are invited to the institution for better teaching learning process. • There is a continuous assessment of teachers by the students as per the prescribed guideline of the institution. There is a feedback mechanism to get information from employers about the quality of graduates and desired attributes of the student graduates. • The final year students of the undergraduate courses in engineering are allowed to take up project work in different industries/organization to have hands on training on Industrial practices, which also help them in campus placement. • Institution has introduced need-based courses for preparing students for Industrial requirements.

| Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link |
| --- |
| http://www.silicon.ac.in |

## 7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

To provide best of technical education with a human look. Teaching-Learning Process • Well-planned and pre-defined process for effective teaching-learning process • Academic Committee meeting – 4 times a year • Non-negotiable Academic Calendar for each semester • Academic Planning (ERP) : 3 months before upcoming semester • Academic Process – Implemented in ERP (start to finish) • Class Feedback taken by HODs between 2nd to 4th week of start of teaching • Attendance Course Progress Monitoring by HODs • Faculty Advisor Interaction – once every week • Moderation for maintaining quality of Internal Questions • Internal Exams and Quiz – centralized, conducted by CoE (strict, fair, disciplined) • Project groups guide allocation – completed in 1st month of 6th semester • Emphasis on interdisciplinary research oriented projects • Adherence to Academic Calendar • Maintenance of Course Files • Learning Objectives of the Course and Pre-Requisites • Course Policies and Procedures, BPUT Syllabus, Evaluation Criteria • Detailed Lesson Plan, Question Banks, supplementary materials • Attendance and Course Progress Monitoring • Fair timely evaluation, showing answer script to students and discussion • Use of ICT, NPTEL Videos, Notes and Video lectures by faculty members • Encourage class interaction for effective learning experience • Additional / remedial classes for slow learners, Chamber consultancy • Surprise Tests and Assignments, regular viva in Lab by Co-Faculty • Faculty feedback by Students – collected in last week of semester Teaching Methods Silicon practices a combination of traditional and modern methods of teaching and the faculty members are exposed and trained on these different methods and are adequately knowledgeable to choose the suitable method or methods for the topics to be taught in the class. The followings are

a list of methods a) Lecture: Oral presentation is one of the traditional methods of teaching in which the faculty members of Silicon are very good. They take care of the clarity in voice, audibility, pace and impact while giving a lecture. They are properly trained to develop a good communication skill for such purposes. b) Lecture with discussion: At times it becomes necessary to initiate participation from the students by engaging them in discussion on certain topics. The faculties members are take care of such requirements by guiding the students for a fruitful discussion which allows the students to learn the concepts in a better way. c) Brain Storming: The faculty members allow the students to brain storm over some topic or problems to reach or propose a solution. It has also created a healthy competition among the students to come up with better and innovative solutions for the problems. d) Use of Technology in the classroom: For better coverage of topics in limited time use of power point and DVD are becoming essential. 75 of classrooms of the Institute are equipped with all these facilities which are used by the teachers effectively. Faculty members use simulations and animations to explain many engineering process effectively. The NPTEL Video courses add value to these practices. e) Case Studies:

| Provide the weblink of the institution |
|---|
| https://silicon.ac.in/wp-content/uploads/2021/10/SIT-Academic-Rules-Regulations-2020-21-v2.pdf |

## 8.Future Plans of Actions for Next Academic Year

1-To open course in emerging fields like Data Science, Machine Learning 2- To have a holistic approach towards issues of national importance 3-To devise yearly action plan for each academic department and execute it in line with institutional vision and mission 4- To develop an interdisciplinary research culture. Effective student centric learning process. 2-Inducing research culture 3-Promoting skill-based courses 4-More emphasis on skill based courses 5-Emphasis on innovation and strat ups 6- Post NBA Accreditation works Improvement in various quality parameters like increase in the number of all clear subjects and average SGPA. Substantial increase in the number of good Publications. More multidisciplinary projects undertaken under SRPS. Conduction of skill-based invited TALKS Workshops at the department level Nore awards and recgnition for students in national level Involvement of faculties in preparing good number of teaching materials. Effective student centric learning process. 2-Inducing research culture 3-Promoting skill-based courses. 4-Galvanising the efforts to apply for funded research. • Academic Autonomy • Centre of excellence and accreditation of all departments • Global Curriculum with Industry Oriented innovative electives • All round learning and development for students • To achieve faculty cadre ratio with 80 Ph.D. • Improving the success rate in University result and other exam like UPSC/OPSC/GATE/CAT/XAT • Enhancement of placement to 100 • Collaboration with academically advanced institutes • Development of an advanced communication skills center in language and personality development • Roof-Top solar installations