### TEQIP-III Action Plan for July, 2020 to September, 2020

<table>
<thead>
<tr>
<th>Subcomponent:</th>
<th>L3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the Institute:</td>
<td>SCHOOL OF ENGINEERING, COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY, KERALA</td>
</tr>
</tbody>
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#### Total Expenditure

<table>
<thead>
<tr>
<th>Sub-Heads</th>
<th>Activities</th>
<th>August 2020</th>
<th>September 2020</th>
<th>Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.1.1 Equipments (for hostel, sports and any non-academic activity not permitted)</td>
<td>SOE_EER_ELECTRICAL_MACHINE_ELAB_EQUIPMENT- 10,21,43,74</td>
<td>40,05,65,00</td>
<td>2,64,00,00</td>
<td>2,71,00,00</td>
</tr>
<tr>
<td>1.3.1.2 Learning resources (e-books, e-journals, software, text book etc.:</td>
<td>SOE-SE-Feautres-Helmets-3,14,35,02</td>
<td>SOE_FLAT BED SCANNER-2,71,372,00</td>
<td>SOE_VIDEO CONFERENCING_SYSTEM-4,10,285,00</td>
<td>SOE_DIESEL_GENERATOR-11,06,706,00</td>
</tr>
<tr>
<td>1.3.1.3 Furniture (for hostel, sports and any non-academic activity not permitted, but allowed for TEQIP Cell)</td>
<td></td>
<td></td>
<td>BOOKS/JOURNAL-5,00,00,00</td>
<td>5,00,00,00</td>
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<tr>
<td>1.3.1.4 Minor civil works (for hostel, sports and any non-academic activity not permitted, but allowed for TEQIP Cell)</td>
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#### Equipment Details

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<thead>
<tr>
<th>Item</th>
<th>Amount (in Rs.)</th>
</tr>
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<tr>
<td>SOE_EER_ELECTRICAL_MACHINE_ELAB_EQUIPMENT</td>
<td>10,21,43,74</td>
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</tr>
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<td>BOOKS/JOURNAL</td>
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<td></td>
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#### Research Assistantships

- 1. Research Assistantship in engineering & applied science discipline for full time Ph.D. students excluding QIP candidates or any other scheme
- 2. Providing consultancy as decided by competent authority of institution

#### Graduates employability

- 1. Awareness drive: workshops about the idea of 'Innovation' & 'Startup'
- 2. Continuous Drive of Competitions: Smart India Hackathon, Idea up
- 3. Induction Training for 1st year & lateral entry students in 2nd year – Training of faculty mentors by induction coordinators already trained; lectures on Unversal human values, Crash course on communication skills, crash/bridge courses on conceptual learning on mathematics and physics, exposure to an art and craft training, physical activities (even faculty with honourarium/financial help)
- 4. Workshop on Student Excellence and Learning Programme (SELP) at level of'%
- 5. GATE Orientation Programme for all students
- 6. GATE Preparation Classes from 3rd year onwards;
- 7. GATE Registration Fee (only for final year students)
- 8. GATE Preparation Classes from 2nd year onwards;
- 9. GATE Registration Fee (only for final year students)
- 10. Peer Learning- incentivizing students
- 11. Student Visits to IIT & R&D organizations;
- 12. Institutional memberships for professional societies
- 13. Sponsorship of 20% on academic activities in Tech Fest;
- 14. Registration Fees and TADA for students participating in Tech Fest at IITN;
- 15. Exposure visits of school backward and girls students to reputed universities
- 16. Providing GATE and licenced materials for students preparing for GATE and not participating in training.
- 17. Expenditure of conduct of practicals for students in other nearby institutions on advance equipments

#### GATE online coaching

1. GATE online coaching - Construction (INST) - 325000
2. GATE online coaching - (INST) - 5,03,00,00

#### Workshop Details

- 1. Day Workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 2. 1 Day Workshop on Internet Of Things for Seventh semester students - Dr. Lalitha R. Nair & Ms. Maria Mary
- 3. 2 days online workshop on 'Machine Learning - A Hands on approach' (IT- Santaje Raj) - Rs. 1,00,000/-
- 4. Five days workshop on 'Machine Learning - A Hands on approach' (IT- Santaje Raj) - Rs. 1,00,000/-
- 5. Online Softskill training - 15000 (EE)
- 6. Workshop on 'Advanced Wireless Sensor Network using Contiki-C. Kovoor' - Rs. 20,000/-
- 7. One day Workshop on  'Machine Learning approaches for Covid Research' by Dr. Biju K. Shenoy & Ms. Livia, Covidence Research Consortium (IT-Dr. Biju K. Shenoy) - Rs.20,000/-
- 8. Two days workshop on 'Machine Learning and Big Data' (IT- Santaje Raj) - Rs. 25,000/-
- 9. Workshop on 'Machine Learning and Big Data' (IT- Santaje Raj) - Rs. 25,000/-
- 10. Workshop on 'Computer Vision' using OpenCV and Keras by Mr. Michael George, Assistant Professor, IIT, Kottayam - Rs. 8000/-
- 11. Five days workshop on 'Machine Learning- A Hands on approach' (IT-Santaje Raj) - Rs. 1,00,000/-
- 12. 2 days online workshop on Embedded programming on AVR-Atmel252000000 (EE)
- 13. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 14. 1 Day Workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 15. 1 Day Workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 16. 2 days online workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 17. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 18. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 19. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 20. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 21. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 22. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 23. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 24. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 25. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 26. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 27. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 28. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 29. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 30. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
- 31. 2 days workshop on Web Technology for Third semester students - Dr. David Peter & Ms. Mina P.V.
1.3.2.4 Faculty Staff Development and motivation

1. Short Term Training Programmes (STTP) in house;
2. Registration fee and TADA for STTP in other reputed institutes;
3. IT training to faculty at IIT or in parent institute;
4. Attending Conferences/ Seminar/ Workshops;
5. Support Staff training;
6. Consultancy of faculty and staff; particularly for disadvantageous sections of the society;
7. Qualification upgradation of faculty and staff;
8. Faculty training on NASCOM future skills;
9. Faculty training on digital pedagogy;
10. Motivational talks for faculty and staff for improving efficiency and
dependability
11. Faculty and staff training in industry (registration fee, TADA, accommodation etc.)

1. Day FDP on TensorFlow & Deep learning - Dr. Saadique Elshmy & Mr. Arun M. O - Rs. 5,00,000/-(CS)
2. Attending STTP/Conference/Seminar etc - Rs. 35,000/-/CS)
3. FDP on Machine learning/Deep learning - hands on Approach (Co-ordinator - Dr. Bhavin Rani, Raleha 75000/-(CS)
4. One day online workshop on 'Teaching Effectiveness in a digital world' by Dr. Sandeep R Varma, Consultant Trainer and Coach, Managing Partner, Aura Consultancy - Co-ordinator - Dr. Mridula S [To be conducted in June 2020 preferably before the commencement of online classes- 50000/-(CS)
5. STTP on "Image Forensics" - Co-ordinators Dr. Durga, Dr. Anju - 75000/-(CS)
6. Online FDP in IOT & embedded systems - Co-ordinators Umi, Dr. Bina Paul - 75000/-(CS)
7. Organising Conferences/ Seminar/Workshops; Qualification Upgradation, Support Staff training - 50000/-(CS)
8. Seminar on Streamlining students to the present system of online assessments 6000/-(CS)
9. Two days workshop on 'Role of Digital Twinning in Industrial and Agricultural Applications' (IT- Dr. Sundhesh Kumar M.B.) - Rs. 50000/- (IT)
10. STTP on "Data Science" (IT- Dr. Snehal Talwalkar & Dr. Deekshita M.)

6,25,000.00
6,55,00,000.00

5.5 FDP on Network Security & Internet Of Things - Ms. Pratibha S & Ms. Luma Johnson K - Rs. 55,000/-(CS)
4.3 Day FDP on Applied Cryptography & Blockchain - Dr. Shikha Mathur & Ms. Malvina Mary Mathews - Rs. 55,000/-(CS)
3.5 For attending STTP/Conference/Seminar etc - Rs. 35,000/- (CS)
2.1 FDP on "advanced computer Architecture and Computational Techniques-Co-ordinator Dr. Rikul K James (CS) and Dr. Deeksha 75000/-(IT) - From (EC)
1.2 Online 6 day FDP on Industrial Automation-750000/-(CS)

1.55,00,000.00

1.1 Attending Conferences/ Seminars/ Workshops for UG/PG/PhD students within or outside institute-200000/-(EE)
2.4 Spaces and consumables for UG-30000/-(EE)
3.4 For attending R&D activities - Rs.30000/- (IT)
4.4 FDP on 'Emerging AI Techniques in Data Analytics' (IT- Dr.Bines C. Kovoor) - Rs.1,00,000/- (IT)
5.4 For attending STTP/Conference/Seminar etc - Rs- 25000/-(IT)
6.4 STTP ON Quality Control (Dr. Bisho Ahi) (Rs. 50,000) - ME
7.4 Registration fee for online Faculty Development Programme for faculty members (Rs. 30000) - ME
8.4 Organising STTP on Industrial Instrumentation and Process Control- 100000.00

2,12,500.00

1.1 Letter Series - Advances in Geotechnical Engineering-100000/-(CS)
2.1 Webinar on Seismic hazard modelling-75000/-(CS)
3.1 Attending Conferences/ Seminars/ Workshops for UG/PG/PhD students within or outside institute-200000/-(EE)
4.1 Spaces and consumables for UG-30000/-(EE)
5.1 For attending STTP/Conference/Seminar etc - Rs- 25000/-(IT)
6.1 Research scholars attending conferences and Training of teachers at other Labs-50000/-(SE)
7.1 Attending conferences, seminars & workshops for students and Student Projects - Rs.15000/-(IT)
8.1 Attending conferences, seminars & workshops for students and Student Projects - Rs.15000/-(IT)

4,62,500.00

1.1 MOOCs Bina Paul, Eldhika Juneja-50000/(CS)
2.1 Development of MOOC’s-Online courses, etc
3.1 Incentivizing faculty for generating digital learning material content development etc
4.1 MOOCs Bina Paul, Eldhika Juneja-50000/-(CS)
5.1 MOOCs and digital learning - Rs.100000/-(IT)
6.1 MOOCs and digital learning - Rs.100000/-(IT)
7.1 Development of MOOCs-100000/-(SE)

2,25,000.00

1.1 MOOCs and digital learning (100000/-(CS)
2.1 Certification fees for online courses-250000/-(CS)
3.1 MOOCs and digital learning - Rs.100000/-(IT)
4.1 Certification fees for online courses-250000/-(EE)
5.1 MOOCs and digital learning - Rs.100000/-(IT)

7,05,000.00

1.1 Training program-Rs. 500000/-(CS)
2.1 Training program - Rs. 500000/-(CS)

1,50,000.00

1.1 Webinar on sustainable materials 100000/-(CS)
2.1 Day FDP on Natural language Processing - Dr. Latha R Nair & Ms. Luma Munihi - Rs.55,000/-(CS)
3.1 For attending STTP/Conference/Seminar etc - Rs.35,000/- (CS)
4.1 Online 6 days FDP on Power System and in Application-75000/-(CS)
5.1 Attending Conferences/ Seminar/Workshops; Qualification Upgradation, Support Staff training -100000/-(CS)
6.1 STTP on Emerging AI Techniques in Data Analytics (IT- Dr.Bines C. Kovoor) - Rs.1,00,000/- (IT)
7.1 STTP ON Supply Chain Management (Dr. Franklin Robert John) (Rs. 50,000) - ME
8.1 STTP on Construction and Procurement (Dr. Gourish V Santhosh Thampi) (Rs. 50,000) - ME
9.1 Attending conferences, seminars & workshops for students and Student Projects - Rs.15000/-(IT)

2,40,000.00

1.1 Hiring Consultancy Services
2.1.1 These ways for carrying out any academic activity a) internal faculty b) external faculty c) outsourcing service provider, etc
3.1.1 External faculty can be invited on remuneration basis (Rs. 700/- per

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### Industry-Institute Interaction

1. Expenditure on TA/DA registration fees for Internships;
2. Inviting Industry expert for lectures;
3. Placement Activities & Hospitality for the companies coming for placement;
4. TA/DA of students and faculty for Industry Visits,
5. Preparation and printing of brochure for placement;
6. Expenditure on submission of collaborative reserach proposals to the industry;
7. Conducting workshops for GD/PI, preparation of CV for placement, mock interviews;
8. Conduct of Alumni meet for career guidance and placement activities;
9. Arranging pool campus;
10. Participation of industry experts in curriculum development through ICC;

**Lecture Series** - 1 Innovative construction (CE) - 7500

- Technical Talk on Disaster Mitigation and management (CE) - 7500
- Talk (online) on "RF ADC Linearization" by Dr. Jos Prakash A V (Post Doctoral Research, University College, Dublin, Ireland)
- "An Overview of Functional Safety", Procon Electric, UK-5000 (EC)
- Expert talk from KSEB, Cochin Refinery-12000(EE)
- Industry Visits - Rs.65000/- (IT)
- Talks by industry experts - 10000 (SE)

**Technical Talk on Environmental engineering(CE) - 7500**

- Expert talk: 'Emerging Technology in IT' for 3rd semester students by TCS - Rs.20000/- (IT- Dr.Daleesha M. Viswanathan)
- Industry Visits - Rs.65000/- (IT)
- Talks by industry experts - 10000 (SE)

**Expert Talk** on 'Agile Development' from Santander Consumer Technology Services gmbh - Rs.20000/- (IT- Dr.Binsu C. Kovoor)

<table>
<thead>
<tr>
<th>Operating Cost</th>
<th>1.3.3</th>
<th>1.3.4</th>
<th>1.3.5</th>
<th>1.3.6</th>
<th>1.3.7</th>
<th>TOTAL</th>
</tr>
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<tbody>
<tr>
<td><strong>1.3.3.1 Consumables</strong></td>
<td>12,000.00</td>
<td>12,000.00</td>
<td>12,000.00</td>
<td>12,000.00</td>
<td>5,000.00</td>
<td><strong>36,000.00</strong></td>
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<tr>
<td><strong>1.3.3.2 Operation and maintenance of equipments</strong></td>
<td>2,500.00</td>
<td>2,500.00</td>
<td>2,500.00</td>
<td>2,500.00</td>
<td>2,500.00</td>
<td><strong>10,000.00</strong></td>
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<tr>
<td><strong>1.3.3.3 Office expenses</strong></td>
<td>5,000.00</td>
<td>5,000.00</td>
<td>5,000.00</td>
<td>5,000.00</td>
<td>15,000.00</td>
<td><strong>30,000.00</strong></td>
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<tr>
<td><strong>1.3.3.4 Meetings (only project related meetings)</strong></td>
<td>35,000.00</td>
<td>35,000.00</td>
<td>35,000.00</td>
<td>35,000.00</td>
<td>1,05,000.00</td>
<td><strong>3,46,000.00</strong></td>
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<tr>
<td><strong>1.3.3.5 Hiring of Vehicles (only for project activities)</strong></td>
<td>2,000.00</td>
<td>2,000.00</td>
<td>2,000.00</td>
<td>2,000.00</td>
<td>6,000.00</td>
<td><strong>12,000.00</strong></td>
</tr>
<tr>
<td><strong>1.3.3.6 Travel Cost (only for project activities)</strong></td>
<td>2,000.00</td>
<td>2,000.00</td>
<td>2,000.00</td>
<td>2,000.00</td>
<td>6,000.00</td>
<td><strong>12,000.00</strong></td>
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<tr>
<td><strong>1.3.3.7 Salary (in TEQIP office Only)</strong></td>
<td>96,600.00</td>
<td>96,600.00</td>
<td>96,600.00</td>
<td>96,600.00</td>
<td><strong>384,400.00</strong></td>
<td><strong>3,00,000.00</strong></td>
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**TOTAL** | 58,44,752.00 | 31,69,100.00 | 1,14,18,452.00 | **5,52,000.00** | **3,52,000.00** | **1,14,18,452.00**