Grams: UNICOLENG Website:www.uceou.edu



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Dated: 15.06.2022

### University College of Engineering

(AUTONOMOUS)
OSMANIA UNIVERSITY, HYDERABAD – 500 007.

Lr.No.1506/Admn/UCE/OU

The following Academic and Research Facilities and Infrastructure Facilities are required for overall development of University College of Engineering, Osmania University. This proposal may be submitted to the Alumni of OU for their contribution /sponsorships.

#### I- Academic & Research Facilities

## 1. Establishment of state of art laboratories for UG/PG/PhD Students

S.No	Title	Estimated amount in Rs.
Department of BME		
1	Sensors and Signal Conditioning Lab	Rs. 4.00 lakhs
2	Tri Biology – Lab	Rs. 4.00 Lakhs
3	Cell & Tissue engineering lab	Rs. 5.00 Lakhs
4	3D Doctor Software (for 3D modelling and Printing)	Rs. 15.00 Lakhs
Department of Civil Engineering		
1	Concrete technology Lab	Rs. 5.00 Lakhs
2	Fluid mechanics Lab	Rs. 5.00 Lakhs
3	Environmental Engineering Lab	Rs. 5.00 Lakhs
4	Transportation Engineering Lab	Rs. 5.00 Lakhs
5	Survey Lab	Rs. 5.00 Lakhs
6	Testing of material lab	Rs. 5.00 Lakhs
7	Geo technical engineering lab	Rs. 5.00 Lakhs

8	Engineering Geology lab	Rs. 5.00 Lakhs	
Department of CSE			
1	Al Lab	Rs. 15.00 Lakhs	
2	ML Lab	Rs. 15.00 Lakhs	
	Department of ECE		
1	IOT Lab	Rs. 5.00 Lakhs	
2	Advanced Communication Lab	Rs. 5.00 Lakhs	
3	RF & Microwave Lab	Rs. 4.00 Lakhs	
4	VLSI & Embedded Systems	Rs. 3.00 Lakhs	
5	Heterogeneous computing Lab	Rs. 3.00 Lakhs	
Department of Electrical Engg.			
1	Altium PCB design Software	Rs. 1.00 Lakh	
2	Tektronics: A622 AC DC Current probe/BNC	Rs. 3.00 Lakhs	
3	TBS2104 : Digital Storage Oscilloscope:	Rs. 3.00 Lakhs	
4	P5200A : High Voltage Probe	Rs. 3.00 Lakhs	
5	Programmable DC Power Supply / Solar Array Simulation Model Model no : 62150H-600S	Rs. 6.00 Lakhs	
6	Yokogawa Oscilloscope	Rs. 6.00 Lakhs	
7	Regulated power supply: for low power GPE 4323	Rs. 3.00 Lakhs	
8	Yokogawa Current Probes	Rs. 5.00 Lakhs	
9	Level Shifters for Inverter Stack	Rs. 3.50 Lakhs	
10	DSP/FPGA Development Boards	Rs. 3.50 Lakhs	
11	Fluke Megger	Rs. 1.00 Lakh	

		T	
12	PLC Lab equipment	Rs. 3.00 Lakhs	
13	Codesys software for PLC	Rs. 3.00 Lakhs	
14	PSCAD software	Rs. 6.00 Lakhs	
15	Three phase Transmission line model for Lab	Rs. 3.00 Lakhs	
	Department of Mechanical Engineering		
1	CREO software	Rs. 5.00 Lakhs	
2	Solid Works software	Rs. 5.00 Lakhs	
3	ANSYS software	Rs. 5.00 Lakhs	
4	Catia software	Rs. 5.00 Lakhs	
5	PLC Trainer Kit with SCADA	Rs. 4.00 lakhs	
6	Ultra-Liquid Nitrogen Bath (Cryogenic Heat Treatment)	Rs. 5.00 lakhs	
7	FFT analyzer with accelerometers	Rs. 5.00 lakhs	
8	Mechanical test bed	Rs. 5.00 lakhs	
9	Model AUTODESK FUSION 360	Rs. 5.00 lakhs	
10	Ultrasonic Flow meter	Rs. 1.50 lakhs	
11	Probe sonicator	Rs. 3.50 lakhs	
12	KD2 pro thermal conductivity meter and TR-1 Sensor	Rs. 5.00 lakhs	
13	Computerized reciprocating pump test apparatus	Rs. 3.50 Lakhs	
14	Reynold's Apparatus	Rs. 2.60 Lakhs	
	College Level		
1	AutoCAD software	Rs. 5.00 Lakhs	
2	Mimics software	Rs. 5.00 Lakhs	
3	GeoMagics Design X software	Rs. 15.00 Lakhs	
4	Establishment of research lab in each department with minimum 50 capacity, with software, computer facilities.	Rs. 70.00 Lakhs	

5	Sponsoring hardware kits working model in the respective laboratories.	Rs. 7.00 Lakhs Per year
6	Special Facilities for Divyang (Physically Challenged) students	Rs. 15.00 Lakhs
7	Installation and Maintenance of campus Wi-Fi for Engineering college	Rs. 50.00 Lakhs
University Level		
1	MATLAB software	Rs. 8.00 Lakhs per year
2	Tally software (40 users)	Rs. 4.00 Lakhs per year
3	e-office software	Rs. 8.00 Lakhs per year
Diamond Jubilee Library		
1	e-Journals subscription IEEE, ACS, ASME, ACM etc.	Rs. 55.00 Lakhs per year

# 2.0 Establishment of Common Engineering Facilities Center (CEFE): A Multi-Disciplinary Center of Excellence

S.No	Title	Estimated amount in Rs.
1	CEME: Industry 4.0, IoT, Digital Manufacturing, Simulation, Additive Manufacturing, Electric Autonomous Vehicles, & Software and Hardware Objective: Student Trainings, Upskilling, Joint Research Activities, Consultancies, Joint Certification Courses with Industry	Rs. 10 Crore
2	Siemens Centre of Excellence on Medical equipment	Rs. 40 Lakhs

### II - Fellowships/ Free ships/ Incentives/ other facilities

S.No	Title	Estimated amount in Rs.
1	Institution of Scholarship/ fellowship/	Rs. 5000-50000
	internship/ stipend for UG/PG/PhD students	per month
2	Institution of Gold Medals.	Rs. 5 Lakhs
	(Onetime deposit for each Gold medal)	Per medal
3	Sponsoring Tuition fee for meritorious poor	Rs. 35000
	students (per students)	per year
4	Institution of Alumni Chair	Rs. 3.00 Lakhs
-		per month
5	Financial support for Adjunct Professors for a	Rs. 50000
	period of 6 month/12 month/18 months	per month
	Sponsoring of smart class rooms and blended class rooms for UG and PG students	Rs. 10.00 Lakhs
6	(LED Projectors, Smart benches, Lecture	Per Dept.
	recording Facility and Digital Board.)	i ei Dept.
	Sponsoring training programs on coding,	D 40.00 L LL
7	higher studies GRE/TOEEL/IELTS/GATE/	Rs. 10.00 Lakhs
	GMAT/CAT Civil services Exams	per year
8	Sponsoring for incubation of IDEAs in startup	Rs. 10.00 Lakhs
	cell	per year
		Rs. 2.00 Lakh
9	Sponsoring Endowment lecture	per <u>y</u> ear,
		per Dept.
10	Sponsoring e-books/Laptops/Desktops for UG	Rs. 10.00 Lakh
	Students  Medarnization Ungradation and Automation	Do 15 00 Joleho
11	Modernization, Upgradation and Automation	Rs. 15.00 lakhs
	of mess & kitchen facility in hostel Mess Sponsoring sports material and students to	Per hostel
12	attend the outside national/ International	Rs. 7.00 Lakhs
'-	sports	Per year
	Sponsoring research database access in	Rs. 50.00 Lakhs
13	Scopus/ Web of science/ SCI	Per year
44	Sponsoring of software of National/	Rs. 10.00 Lakhs
14	International patent search	Per year
15	·	Rs. 15.00 Lakhs
13	Sponsoring of Plagiarism search software	Per year
16	Sponsoring of basic Laptop/Tabs for	Rs. 8.00 Lakhs
	placement online exams and interviews	1.0. 0.00 Laining

### **III- Infrastructural Facilities**

Estimated		
S.No	Title	amount in Rs.
1	Construction of 1000 Bedded New Girls Hostel	As per Govt. Norms
	Construction of 1500 Raddad Rays Hastal in	
2	Construction of 1500 Bedded Boys Hostel in	As per Govt. Norms
	place of Kinnera and Ganga Hostel	
3	200 Bedded Engineering Research Scholars Hostel.	As per Govt. Norms
	500 bedded PG Hostel for ME/M.Tech./MCA	As per Govt.
4	students	Norms
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5	Gym for Ladies Hostel: 2 Nos.	Rs. 50 Lakhs
6	Swimming Fool for Engineering College	Do EO Lokho
6	Students	Rs. 50 Lakhs
7	Gym Facilities 1 No. (200 Capacity) for boys.	Rs. 50 Lakhs
8	Seminar Hall/Conventional Hall(500 Capacity)	As per Govt. Norms
0	Creation & Maintenance of Lans, Landscape	Rs. 2.00 Lakhs
9	Gardens in front of college, in front of Hostels	per building
	Installation and maintenance of solar	
10	streetlights for Engineering college,	Rs. 2.0 Crores
	Departments, Hostel Premises	
11	Maintenance of CCTV Cameras	Rs. 20. Lakhs
• •	Walltonando di CCT V Califordo	per year
	Installation and Maintenance of safe drinking	Rs. 20.00
12	water facilities	Lakhs
		per year
13	Establishment of STP (Sewerage Treatment	Rs. 20.0
	Plants) at least 1 number	Crores
14	Construction of Library for 1000 Capacity with	As per Govt.
	minimum two floors	Norms
15	Construction of Indoor stadium with tennis,	Rs. 15.0
	volleyball, badminton etc., Lift facility for Engineering college main building	Crores
16	(With external steel/RCC structure)	20 lakhs
17		50 lakhs
17	Sponsoring Ambulances: 2no's	ou lakiis
	Sponsoring electric mini bus to college	
18	students. (for industrial visits, field trips and	75 lakhs
	educational tours, internships)	CAI

Sd/-

Prof. Sriram Venkatesh Principal, UCE, OU