Jagdu Singh Charitable Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

Autonomous College Affiliated to University of Mumbai
Approved by All India Council for Technical Education(AICTE) and Government of Maharashtra(GoM)
Conferred Autonomous Status by University Grants Commission (UGC) for 10 years w.e.f. A.Y 2019–20
Amongst Top 200 Colleges in the Country, Ranked 193rd in NIRF India Ranking 2019 in Engineering College category
• ISO 9001:2015 Certified • Programmes Accredited by National Board of Accreditation (NBA), New Delhi
• Institute Accredited by National Assessment and Accreditation Council (NAAC), Bangalore

Estd. in 2001

Department of Information Technology
T.E. Semester –VI
Choice Based Credit Grading Scheme with Holistic and Multidisciplinary Education (CBCGS-HME 2023)
Proposed TCET Autonomy Scheme (w.e.f. A.Y. 2023-24)

I. Academic and Research as per AICTE Model Curriculum

Sr. No.	Course Code	Course Title	Theory	Tutorial	Practical	Contact Hours	Credits	ISE	IE	ESE	PR/OR	TW	Total
		Course Description	**Modes of Teaching / Learning / Weightage**					**Modes of Continuous Assessment / Evaluation**					
			Hours Per Week					**Theory (100/50)**			**Practical / Oral / Presentation (25)**	**Term Work (25)**	
								40		**60**			
								IA			**PR/OR**	**TW**	
			Theory	Tutorial	Practical	Contact Hours	Credits	ISE	IE	ESE			Total
1	HCMC-601	Work Place Mental Health	2	-	-	2	2	10	10	30	-	25	75
2	PCC-IT 601	Data Mining and Business Intelligence	3	-	2	5	4	20	20	60	25	25	150
3	PCC-IT 602	Software Engineering	3	-	2	5	4	20	20	60	25	25	150
4	PEC- IT 601X	Professional Elective-I	3	-	-	3	3	20	20	60	-	25	125
5	OEC-601X	Open Elective-I	3	-	-	3	3	20	20	60	-	25	125
6	HME –RBL601	Research Based Learning	-	-	2	2	1	-	-	-	25**		25
		Total	**14**	**-**	**4**	**18**	**16**	**Total Marks (Academic)**					**650**

II. Professional Development, Industry Practices & Internship

	Course Description		Teaching scheme (Holistic and Multidisciplinary Education-HME)					Presentation AC	Report AC		Term Work
								Assessment/Evaluation Scheme			
1	HME –IT-PS601	Professional Skills V (Generic Track/Industry Track/Core Track)	-	-	2	2	1	15	10		25
2	HME –IT-IP601	Industry Practice-IV (Generic Track/Industry Track/Core Track)	-	-	2	2	1	15	10		25
3	SI- IT 601	Summer Internship	-	-	–	120*	3	-	-	50	50
		Total	**-**	**-**	**4**	**04**	**5**	**Total marks (HME)**			**100**

III. Holistic and Personality Development

	Course Description									**Term Work**	
2	AP-IT601	AICTE Acivity Point	-	-	-	52#	-	-	-	-	
		Total	**14**	**-**	**10**	**24**	**22**	**Grand Total marks**			**750**

IV. Specialization with Multidisciplinary Learning(Optional)

1	MDL-601	Advanced course -I in Emerging Areas of specialization	3	-	4	7	5	20	20	60	25	-	**125**

Exit option with Bachelor's Degree in Vocation(B.Voc) or B.Sc (Engg/Tech) (131 Credits)
** Research Based Learning 25 Marks: 15 Marks for Presentation and 10 Marks for Report

Website : www.tcetmumbai.in

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PROFESSIONAL ELECTIVE I		
Course Code	**Course name**	**Domain**
PEC-**IT** 6011	**Internet of things**	1
PEC-**IT** 6012	**Project Management**	2
PEC- **IT** 6013	**Artificial Intelligence**	3
PEC-**IT** 6014	**Ethical hacking and Digital Forensics**	4
PEC- **IT** 6015	**Analysis of Algorithms**	5

List of Courses- Open Electives (Interdisciplinary Offerings)

SEM-VI Emerging Technologies		
OPEN ELECTIVE I To be conducted by dept. for other dept. students (e.g. Not for COMP/IT background students if completed as a core or PE course)		
Sr.No	**Course Code- OEC601X (Dept. Name)**	**Course name**
1	COMP	Basics of Social Network Analysis (SNA)
2	IT	Basics of Robotic Process Automation (RPA)
3	EXTC	Fundamentals of Communication Engineering
4	E&CS	Introduction to Eco-design of Sustainable Electronic Products
5	CIVIL	Fundamentals of Development Engineering
6	MECH	Introduction to Industry 4.0
7	AIDS	Introduction to Artificial Intelligence and Data Science
8	IOT	Introduction to IoT Applications
9	AIML	Introduction to Blockchain
10	CS&E	Basics of Cyber Security and Laws
11	MME	Introduction to Robotics
12	EH&S	English for Competitive Exams

I. Academic and Research as per AICTE Model curriculum:

1.The Academic year will be conducted through two semesters. Odd Semester (1st July-31st December) and Even Semester (1st January-30th June) as per Academic Calendar.

2.The credit calculation is a) Theory/Tutorial:1 credit=1 hr b) Practical/ITP: 1 credit =2 hrs c) Experiential Learning/Internship: 1 credit= 40-45 hrs, Professional skills/Industry Practices/Industry Certification: 1 credit =2 hrs, Activity Based Learning/Project Based Learning/Research Based Learning/B.E project : 1 credit=2 hrs

3.Contact Hrs for students per semester(15 weeks) is: Direct Contact hrs 35 x 15 = 525 + Indirect Contact = 8 x 15 =120 + Internship =60 hrs / semester = 705 hrs/ semester

II. Professional Development, Industry Practices & Internship:

4.Professional Skills & Industry Practice activity will run in the form of integrated theory and practical course & syllabus is linked with Industry or respective NSQF level.

5.Students can opt for any one track- Generic track /Industry track / Core track.

6.The summer/winter Internship will be conducted in the form of in-house/outhouse which is mandatory for all students in semester break. The internship credits accumulated will be credited in

  even semester.

III. Holistic & Personality Development:

7.Activity Based Learning/Project Based Learning/Research Based Learning will be conducted in Sem IV,V and VI respectively.

8.# As per AICTE, Students has to earn 100 Points by participating in 400 Hrs. of activities during 4 years of Engineering. After Completing 48 hrs. of Activities, Students can earn 12 Points. These Points

 will not be reflected in Grade Card. Separate transcript will be issued to students after completion of Final Year.

9.Professional Body/Extra Curricular/Co-Curricular/ Multidisciplinary learning/Workshop/Technical Seminar/Domain Activity/ NCC(Physical education & Defense studies)/Outreach activities will be considered under AICTE 100 activity points.

IV. Specialization with Multidisciplinary Learning:

10. Award of Major & Minor degree: Students need to aquire 18 credits in specialized emerging technology areas for award of Major(Honors/Research) /Minor degree which is optional.

V. Multiple Entry & Exit:

11. Multiple Entry & Exit: Provision for multiple entry and multiple exit is as per NEP 2020 & regulatory guidelines and notification of the Institute.

12. Academic Bank of Credits:The credits accumulation, transfer and lateral movement of students is as per policy guidelines.

VI. Examination Conduct and Evaluation & Assessment:

13.For continuous evaluation, examination shall be conducted under two heads: IA – In-Semester Assessment, ESE – End Semester Examination.

Sr.No	Head	Type	Duration	Marks
1	In Semester Examination I&II	Summative	1 hr	20 marks each
2	In Semester Examination III	Formative	1 hr (Group activity)	20 marks
3	Innovative Examination	Formative	1 hr (Group activity)	20 marks
4	End Semester Examination	Summative	2 hrs	60 marks

14. The evaluation & Assesment for acquiring additional 18 credits for Major/Minor/Research degrees will be held along with IA/ESE

SD/-

SD/-
Dr.Rajesh Bansode
HoD
Chairman-BoS

SD/-
Dr.Sheetal Rathi
Dean Academic
Convenor-Academic Council

SD/-
Dr. R.R Sedamkar
Vice Principal
Member Secretary-Academic Council

SD/-
Dr.B.K.Mishra
Principal
Chairman-Academic Council