

PG-CMPN



AC 14/7/2016

Item No. 4.25

UNIVERSITY OF MUMBAI



Revised Syllabus

For

Master of Engineering

Program: M. E. (Computer Engineering)

Under

FACULTY OF TECHNOLOGY

(As per Choice Based Credit and Grading System)

from

Academic Year 2016-17



From Co-ordinator's Desk:

To meet the challenge of ensuring excellence in engineering education, the issue of quality needs to be addressed, debated and taken forward in a systematic manner. Accreditation is the principal means of quality assurance in higher education. The major emphasis of accreditation process is to measure the outcomes of the program that is being accredited. In line with this Faculty of Technology of University of Mumbai has taken a lead in incorporating philosophy of outcome based education in the process of curriculum development.

Faculty of Technology, University of Mumbai, in one of its meeting unanimously resolved that, each Board of Studies shall prepare some Program Educational Objectives (PEO's) and give freedom to affiliated Institutes to add few (PEO's) and course objectives and course outcomes to be clearly defined for each course, so that all faculty members in affiliated institutes understand the depth and approach of course to be taught, which will enhance learner's learning process. It was also resolved that, maximum senior faculty from colleges and experts from industry to be involved while revising the curriculum. I am happy to state that, each Board of studies has adhered to the resolutions passed by Faculty of Technology, and developed curriculum accordingly. In addition to outcome based education, **Choice Based Credit and Grading System** is also introduced to ensure quality of engineering education.

Choice Based Credit and Grading System enables a much-required shift in focus from teacher-centric to learner-centric education since the workload estimated is based on the investment of time in learning not in teaching. It also focuses on continuous evaluation which will enhance the quality of education. University of Mumbai has taken a lead in implementing the system through its affiliated Institutes Faculty of Technology has devised a transparent credit assignment policy adopted ten points scale to grade learner's performance. Choice Based Credit and Grading System were implemented for First Year Master of Engineering from the academic year 2016-2017. Subsequently this system will be carried forward for Second Year Master of Engineering in the academic year 2017-2018.

Dr. Suresh K. Ukarande

Co-ordinator,

Faculty of Technology,

Member - Academic Council

University of Mumbai, Mumbai



University of Mumbai, M. E. (Computer Engineering) Rev. 2016.


PRINCIPAL

St. Francis Institute
Of Technology (Engg-College)
Mount Poincur, S. V. P. Road,
Borivli (West), Mumbai - 400 103.

Preamble:

The M. E. in Computer Engineering programme is offered to students who are interested in advanced learning and research in any area of Computer Science and Engineering. Applicants to this programme are expected to have a background in Computer Science and Engineering or Information Technology.

The objective of the programme is to enable the learner to apply his/her enhanced skill and knowledge at the top research laboratories and companies in the country and even abroad.

The programme is a 72-credit degree programme, which is usually spread over 4 semesters for a full-time student. About two-thirds of the credits involve coursework, and the remaining consists of project work. The emphasis is on conducting original research and writing a thesis individually. The programme is flexible enough to allow a student to specialize in any topic of interest by taking elective (optional) courses and working on a research project in that area.

University of Mumbai feels that it is desirable to provide specialized ME programme in Computer Engineering to address the needs of the industry, which today requires more specialized resource in each field.

Faculty of Technology, University of Mumbai has taken a lead in incorporating philosophy of Choice Based Education in the process of curriculum development.

Dr. Subhash K. Shinde

Chairperson,

Adhoc Board of Studies in Computer Engineering,

University of Mumbai, Mumbai.

University of Mumbai, M. E. (Computer Engineering) Rev. 2016.



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Program Structure for ME Computer Engineering,

(With Effect from 2016-2017)

University of Mumbai)


Semester –I

Course Code	Course Name	Teaching Scheme			Credits Assigned			
		Theory	Pract	Tut	Theory	Pract	Tut	Total
CSC101	Algorithm & Complexity	04	---	---	04	---	---	04
CSC102	Advance Computer Network and Design	04	---	---	04	---	---	04
CSC103	Advanced Operating Systems	04	---	---	04	---	---	04
CSDLO-I	Department Level Optional Course-I	04	---	---	04	---	---	04
ILO-I	Institute Level Optional Course-I	03	---	---	03	---	---	03
CSL101	Computational Laboratory-I	--	02	--	01	---	--	01
CSL102	DEC Laboratory-I	--	02	--	01	---	--	01
Total		19	04	--	21	--	--	21

Course Code	Course Name	Examination Scheme							
		Theory					TW	Oral/Pract	Total
		Internal			End Sem. Exam	Exam Duration (in Hrs)			
		Test 1	Test 2	Avg.					
CSC101	Algorithm & Complexity	20	20	20	80	3	--	---	100
CSC102	Advance Computer Network and Design	20	20	20	80	3	--	---	100
CSC103	Advanced Operating Systems	20	20	20	80	3	--	---	100
CSDLO-I	Department Level Optional Course-I	20	20	20	80	3	--	---	100
ILO-I	Institute Level Optional Course-I	20	20	20	80	3	--	---	100
CSL101	Computational Laboratory-I	---	---	---	---	---	25	25	50
CSL102	DEC Laboratory-I	---	---	---	---	---	25	25	50
Total		100	100	100	400	---	50	50	600

University of Mumbai, M. E. (Computer Engineering) Rev. 2016.




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**Program Structure for ME Computer Engineering,
(With Effect from 2016-2017)**


University of Mumbai)

Semester –I

Course Code	Department Level Optional Course-I	Course Code	Institute Level Optional Course-I
CSDLO1011	Logic & Automated Reasoning	ILO1011	Product Lifecycle Management
CSDLO1012	Image Analysis & Interpretation	ILO1012	Reliability Engineering
CSDLO1013	Natural Language Processing	ILO1013 ✓	Management Information System <i>July-Dec 2017 -2018</i>
CSDLO1014	Computational Intelligence	ILO1014	Design of Experiments
CSDLO1015 ✓	User Experience Design <i>2017</i>	ILO1015	Operation Research
	<i>July-Dec 2018</i>	ILO1016	Cyber Security and Laws
		ILO1017	Disaster Management & Mitigation Measures
		ILO1018	Energy Audit and Management

University of Mumbai, M. E. (Computer Engineering) Rev. 2016.




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**Program Structure for ME Computer Engineering,
(With Effect from 2016-2017)**

University of Mumbai


Semester –II

Course Code	Course Name	Teaching Scheme (Contact Hours)			Credits Assigned			
		Theory	Pract	Tut	Theory	Pract	Tut	Total
CS201	High performance Computing	04	---	---	04	---	---	04
CS202	Data Science	04	---	---	04	---	---	04
CS203	Ethical Hacking and Digital Forensics	04	---	---	04	---	---	04
CSDLO-II	Department Level Optional Course –II	04	---	---	04	---	---	04
ILO-II	Institute Level Optional Course-II	03	---	---	03	---	---	03
CSL201	Computational Laboratory-II	--	02	--	01	---	--	01
CSL202	DEC Laboratory-II	--	02	--	01	---	--	01
Total		19	04	---	21	--	--	21

Course Code	Course Name	Examination Scheme							
		Theory			End Sem. Exam	Exam Duration (in Hrs)	TW	Oral/Pract	Total
		Internal	Test 1	Test 2					
CSC201	High performance Computing	20	20	20	80	3	--	---	100
CSC202	Data Science	20	20	20	80	3	--	---	100
CSC203	Ethical Hacking and Digital Forensics	20	20	20	80	3	--	---	100
CSDLO-II	Department Level Optional Course –II	20	20	20	80	3	--	---	100
ILO-II	Institute Level Optional Course-II	20	20	20	80	3	--	---	100
CSL201	Computational Laboratory-II	---	---	---	---	---	25	25	50
CSL202	DEC Laboratory-II	---	---	---	---	---	25	25	50
		100	100	100	400	---	50	50	600

University of Mumbai, M. E. (Computer Engineering) Rev. 2016.




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**Program Structure for ME Computer Engineering,
(With Effect from 2016-2017)**


University of Mumbai

Semester –II

Course Code	Department Level Optional Course -II	Course Code	Institute Level Optional Course-II
CSDLO2021	Data Storage & Retrieval <i>Jan to June 2018</i>	ILO2021	Project Management
CSDLO2022	Internet of Things	ILO2022	Finance Management
CSDLO2023	Advance Soft Computing	ILO2023	Entrepreneurship Development and Management
CSDLO2024	Semantic Web & Social Network Analysis	ILO2024	Human Resource Management
CSDLO2025	ICT for Social cause	ILO2025	Professional Ethics and CSR
		ILO 2026	Research Methodology <i>Jan to June 2018</i>
		ILO2027	IPR and Patenting
		ILO2028	Digital Business Management
		ILO2029	Environmental Management

University of Mumbai, M. E. (Computer Engineering) Rev. 2016.




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Program Structure for ME Computer Engineering,

(With Effect from 2016-2017)

University of Mumbai

Semester –III


Course Code	Course Name	Teaching Scheme (Contact Hours)			Credits Assigned				
		Theory	Pract	Tut	Theory	Pract	Tut	Total	
CS301	Special Topic Seminar	---	06	--	---	03	--	03	
CS302	Dissertation-I	---	24	--	---	12	--	12	
Total		---	30	--	---	15	--	15	
Course Code	Course Name	Examination Scheme							
		Theory					TW	Oral/ Pract	Total
		Internal Assessment			End Sem. Exam	Exam Duration (in Hrs)			
		Test 1	Test 2	Avg.					
CS301	Special Topic Seminar	---	---	---	---	---	50	50	100
CS302	Dissertation-I	---	---	---	---	---	100	---	100
Total		---	---	---	---	---	150	50	200

Semester –IV

Course Code	Course Name	Teaching Scheme (Contact Hours)			Credits Assigned				
		Theory	Pract	Tut	Theory	Pract	Tut	Total	
CS401	Dissertation-II	--	30	--	---	15	--	15	
Total		--	30	--	---	15	--	15	
Course Code	Course Name	Examination Scheme							
		Theory					TW	Oral/ Pract	Total
		Internal Assessment			End Sem. Exam	Exam Duration (in			
		Test 1	Test 2	Avg.					
CS401	Dissertation-II	---	---	---	---	---	100	100	200
Total		---	---	---	---	---	100	100	200

University of Mumbai, M. E. (Computer Engineering) Rev. 2016.




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[PG]

PG - Electronics & Telecommunication
R-2016 - Syllabus



AC-14/7/2016
Item No.4.27

UNIVERSITY OF MUMBAI



Revised Syllabus for the Master of Engineering (M.E.) Electronics and Telecommunication Engineering

(As per Choice Based Credit & Grading System with
effect from the academic year 2016-2017)



[Signature]
PRINCIPAL
St. Francis Institute
Of Technology (Engg-College)
Mount Poonjir, S. V. P. Road
Borivali, Mumbai - 400 073


From Co-ordinator's Desk:-

To meet the challenge of ensuring excellence in engineering education, the issue of quality needs to be addressed, debated taken forward in a systematic manner. Accreditation is the principal means of quality assurance in higher education. The major emphasis of accreditation process is to measure the outcomes of the program that is being accredited. In line with this Faculty of Technology of University of Mumbai has taken a lead in incorporating philosophy of outcome based education in the process of curriculum development.

Faculty of Technology, University of Mumbai, in one of its meeting unanimously resolved that, each Board of Studies shall prepare some Program Educational Objectives (PEO's) give freedom to affiliated Institutes to add few (PEO's) course objectives course outcomes to be clearly defined for each course, so that all faculty members in affiliated institutes understand the depth approach of course to be taught, which will enhance learner's learning process. It was also resolved that, maximum senior faculty from colleges experts from industry to be involved while revising the curriculum. I am happy to state that, each Board of studies has adhered to the resolutions passed by Faculty of Technology, developed curriculum accordingly. In addition to outcome based education, **Choice Based Credit and Grading System** is also introduced to ensure quality of engineering education.

Choice Based Credit and Grading System enables a much-required shift in focus from teacher-centric to learner-centric education, since the workload estimated is based on the investment of time in learning and not in teaching. It also focuses on continuous evaluation which will enhance the quality of education. University of Mumbai has taken a lead in implementing the system through its affiliated Institutes Faculty of Technology has devised a transparent credit assignment policy adopted ten points scale to grade learner's performance. Choice Based Credit and Grading System will be implemented for First year Master of Engineering from the academic year 2016-2017. Subsequently this system will be carried forward for Second Year Master of Engineering in the academic year 2017-2018.

Dr. S. K. Ukarande
Co-ordinator,
Faculty of Technology,
Member - Academic Council
University of Mumbai, Mumbai


PRINCIPAL
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Mount Painsur, S. V. P. Road,
Borivli (West), Mumbai - 400 103.



Preamble:

The curriculum in higher education is a living entity. It evolves with time; it reflects the ever changing needs of the society and keeps pace with the growing talent of the students and the faculty. The engineering education in India is expanding in manifolds and the main challenge is the quality of education. All stakeholders are very much concerned about it. The curriculum of Electronics & Telecommunication in Mumbai University is no exception. In keeping with the demands of the changing times, it contains innovative features. The exposure to the latest technology and tools used all over the world is given by properly selecting the subjects. It is designed in such a way to incorporate the requirements of various industries. The major emphasis of this process is to measure the outcomes of the program. Program outcomes are essentially a range of skills and knowledge that a student will have at the time of post-graduation. So the curriculum must be refined and updated to ensure that the defined objectives and outcomes are achieved.

I, as Chairman Ad-hoc Board of Studies in Electronics and Telecommunication Engineering, University of Mumbai, happy to state here that, the heads of the department and senior faculty from various institutes took timely and valuable initiative to frame the Program Educational objectives as listed below.

Objectives:

1. To produce Electronics & Telecommunication engineers, having strong theoretical foundation, good design experience and exposure to research and development.
2. To produce researcher who have clear thinking, articulation and interest to carry out theoretical and/or applied research resulting in significant advancement in the field of specialization.
3. To develop an ability to identify, formulate and solve electronics and telecommunication engineering problems in the latest technology.
4. To develop the ability among students to synthesize data and technical concepts from applications to product design.

These are the suggested and expected main objectives, individual affiliated institutes may add further in the list. I believe that the small step taken in the right direction will definitely help in providing quality education to the stake holders.

This book of curricula is the culmination of large number of faculty members and supporting staff. It also reflects the creative contribution of hundreds of teachers – both serving and retired. I sincerely hope that the faculty and students of Electronics and Telecommunication in Mumbai University will take full advantage of dynamic features of curriculum and make teaching-learning process a truly sublime experience for all.

At the end I must extend my gratitude to all experts and colleagues who contributed to make curriculum competent at par with latest technological development in the field of Electronics & Telecommunication Engineering.

Dr. Uttam D. Kolekar

Chairman, Ad-hoc Board of Studies in Electronics and Telecommunication Engineering



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Program Structure for M.E. (Electronics & Telecommunication)
(w.e.f. A.Y. 2016-2017) Semester I


Subject Code	Subject Name	Teaching Scheme (Contact Hours/week)			Credits Assigned			
		Theory	Pract.	Tut.	Theory	Pract.	Tut.	Total
ETC101	Statistical Signal Processing	04	--	--	04	--	--	04
ETC102	Optical Communication Network	04	--	--	04	--	--	04
ETC103	Modern Digital Signal Processing Applications	04	--	--	04	--	--	04
ETDLO101X	Department Level Optional Course-1	04	--	--	04	--	--	04
ILO101X	Institute Level Optional Course-1	03	--	--	03	--	--	03
ETL101	Laboratory I - Optical Communication Network	--	02	--	--	01	--	01
ETL102	Laboratory II - Modern Digital Signal Processing Applications	--	02	--	--	01	--	01
Total		19	04	--	19	02	--	21

Subject Code	Subject Name	Examination Scheme							
		Theory					Term Work	Pract. /oral	Total
		Internal Assessment			End Sem.E xam.	Exam. Duration (in Hrs)			
		Test1	Test 2	Avg.					
ETC101	Statistical Signal Processing	20	20	20	80	03	--	--	100
ETC102	Optical Communication Network	20	20	20	80	03	--	--	100
ETC103	Modern Digital Signal Processing Applications	20	20	20	80	03	--	--	100
ETDLO101X	Department Level, Optional Course-I	20	20	20	80	03	--	--	100
ILO101X	Institute Level Optional Course-I	20	20	20	80	03	--	--	100
ETL101	Laboratory I - Optical Communication Network	--	--	--	--	--	25	25	50
ETL102	Laboratory II - Modern Digital Signal Processing Applications	--	--	--	--	--	25	25	50
Total		100	100	100	400	--	50	50	600



Subject Code	Department Level Optional Course I	Subject Code	Institute Level Optional Course I
ETDLO1011	Next Generation Networks ^{Yes} 2017	ILO1011	Product Life cycle Management
ETDLO1012	Advanced Antenna Design ²⁰¹⁸	ILO1012	Reliability Engineering
ETDLO1013	Image Analysis using Machine learning	ILO1013	Management Information System
ETDLO1014	Embedded Communication Systems Design	ILO1014	Design of Experiments
		ILO1015	Operations Research
		ILO1016	Cyber Security and Laws
		ILO1017	Disaster Management & Mitigation Measures ²⁰¹⁷
		ILO1018	Energy Audit and Management




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Semester II

Subject Code	Subject Name	Teaching Scheme (Contact Hours/week)			Credits Assigned				
		Theory	Pract.	Tut.	Theory	Pract.	Tut.	Total	
ETC201	Modern Digital Communication	04	--	--	04	--	--	04	
ETC202	Wireless Adhoc and Sensor Networks	04	--	--	04	--	--	04	
ETC203	RF and Microwave Engineering	04	--	--	04	--	--	04	
ETDLO202X	Department Level Optional Course II	04	--	--	04	--	--	04	
ILO202X	Institute Level Optional Course II	03	--	--	03	--	--	03	
ETL201	Laboratory III – Wireless Adhoc and Sensor Networks	--	02	--	--	01	--	01	
ETL202	Laboratory IV – RF and Microwave Engineering	--	02	--	--	01	--	01	
Total		19	04	--	19	02	--	21	
Subject Code	Subject Name	Examination Scheme							
		Theory					Term Work	Pract. /oral	Total
		Internal Assessment			End Sem.Ex am.	Exam. Duration (in Hrs)			
		Test1	Test 2	Avg.					
ETC201	Modern Digital Communications	20	20	20	80	03	--	--	100
ETC202	Wireless Adhoc and Sensor Networks	20	20	20	80	03	--	--	100
ETC203	RF and Microwave and Engineering	20	20	20	80	03	--	--	100
ETDLO202X	Department Level Optional Course II	20	20	20	80	03	--	--	100
ILO202X	Institute Level Optional Course- II	20	20	20	80	03	--	--	100
ETL201	Laboratory III - Wireless Adhoc and Sensor Networks	--	--	--	--	--	25	25	50
ETL202	Laboratory IV - RF and Microwave Engineering	--	--	--	--	--	25	25	50
Total		100	100	100	400	--	50	50	600



Subject Code	Department Level Optional Course II	Subject Code	Institute Level Optional Course II
ETDLO2021	Satellite Networking <i>year</i>	ILO2021	Project Management
ETDLO2022	Network and Cyber Security	ILO2022	Finance Management
ETDLO2023	Remote Sensing	ILO2023	Entrepreneurship Development and Management
ETDLO2024	Error Control Coding	ILO2024	Human Resource Management
		ILO2025	Professional Ethics and CSR
		ILO2026	Research Methodology <i>Year 2017</i>
		ILO2027	IPR and Patenting
		ILO2028	Digital Business Management
		ILO2029	Environmental Management

Annexure IV

Subject Code	Subject Name	Teaching Scheme (A total hours/week)				Credits Assigned	
		Theory	Prac.	Tot.	Theory	Prac.	Total
ETDLO2021	Satellite Networking	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
ETDLO2022	Network and Cyber Security	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
ETDLO2023	Remote Sensing	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
ETDLO2024	Error Control Coding	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
ILO2025	Professional Ethics and CSR	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
ILO2026	Research Methodology	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
ILO2027	IPR and Patenting	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
ILO2028	Digital Business Management	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
ILO2029	Environmental Management	30	15	45	1.5	0.75	2.25
		30	15	45	1.5	0.75	2.25
Total		300	150	450	22.5	11.25	33.75

In case of Session (ETDLO2021) of Hourly work student should be considered for the calculation of load of a teacher.

In case of Session I (ETDLO2021) and Session II (ETDLO2022) of Hourly work student should be considered for the calculation of load of a teacher.



Signature
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Semester III

Subject Code	Subject Name	Teaching Scheme (Contact Hours/week)			Credits Assigned				
		Theory	Pract.	Tut.	Theory	Pract.	Tut.	Total	
ETS301	Special Topic Seminar	--	06	--	--	03	--	03	
ETD301	Dissertation I	--	24	--	--	12	--	12	
Total		--	30	--	--	15	--	15	
Subject Code	Subject Name	Examination Scheme							
		Theory					Term Work	Pract. / Oral	Total
		Internal Assessment			End Sem.Exam.				
		Test1	Test 2	Avg.					
ETS301	Special Topic Seminar	--	--	--	--	50	50	100	
ETD301	Dissertation I	--	--	--	--	100	--	100	
Total		--	--	--	--	150	50	200	


Semester IV

Subject Code	Subject Name	Teaching Scheme (Contact Hours/week)			Credits Assigned				
		Theory	Pract.	Tut.	Theory	Pract.	Tut.	Total	
ETD401	Dissertation II	--	30	--	--	15	--	15	
Total		--	30	--	--	15	--	15	
Subject Code	Subject Name	Examination Scheme							
		Theory					Term Work	Pract. / Oral	Total
		Internal Assessment			End Sem.Exam.				
		Test1	Test 2	Avg.					
ETD401	Dissertation II	--	--	--	--	100	100	200	
Total		--	--	--	--	100	100	200	

Note:

- In case of Seminar (ETS301), 01 Hour / week / student should be considered for the calculation of load of a teacher
- In case of Dissertation I (ETD301) and Dissertation II (ETD401), 02 Hour / week / student should be considered for the calculation of load of a teacher




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 Mount Poincur, S. V. P. Rd
 Borivli (West), Mumbai - 40

AC – 30/09/2016

Item No. 4.17

UNIVERSITY OF MUMBAI



Revised Syllabus for PhdCourse Work

(As per Credit Based Semester and Grading System with effect from the academic year 2017–2018)



S.F.
PRINCIPAL
St. Francis Institute
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Mount Poincur, S. V. P. Road,
Borivli (West), Mumbai - 400 103.


UNIVERSITY OF MUMBAI

No. UG/213 of 2016-17

CIRCULAR:-

A reference is invited to the Syllabi relating to the Ph. D. Course Work vide this office Circular No.UG/121 of 2015-16, dated 24th November, 2015 and the Directors/Heads of the University Departments, Dean/Principals of the affiliated Colleges in Faculty of Technology and Engineering, Pharmacy, Architecture and MCA. are hereby informed that proposal received from Co-ordinator Faculty of Technology, approved by the Academic Council at its meeting held on 30th September, 2016 vide item No. 4.17 and in accordance therewith, the revised syllabus as per the Choice Based Credit System of Ph. D. Course Work for Engineering Faculty, which is available on the University's web site (www.mu.ac.in) and that the same has been brought into force with effect from the academic year 2017-2018.

MUMBAI - 400 032
4th January, 2017


(Dr.M.A.Khan)
REGISTRAR

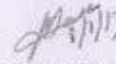
To,

The Directors/Heads of the University Departments, Dean/Principals of the affiliated colleges in Faculty of Technology and Engineering, Pharmacy, Architecture and MCA.


A.C/4.17/30.09.2016

No. UG/213 -A of 2016-17 MUMBAI-400 032 4th January, 2017
Copy forwarded with Compliments for information to:-

- 1) The Co-ordinator, faculties of Technology and Engineering,
- 2) The Chairman & Chairperson of the board of Studies & Ad-Hoc Board of Studies of various subject at faculty of Technology and Engineering, Pharmacy, Architecture and MCA,
- 3) The Director, Board of College and University Development,
- 4) The Co-Ordinator, University Computerization Centre,
- 5) The Controller of Examinations.


(Dr.M.A.Khan)
REGISTRAR

PTO..


PRINCIPAL
St. Francis Institute
Of Technology (Engg-College)
Mount Painsur, S. V. P. Road,
Borivli (West), Mumbai - 400 103.



**Course Work Structure for Phd Program in Faculty of Technology
Mumbai University**
(With effect from Academic Year 2017-18)

CODE	NAME OF COURSE	CONTACT HOURS	CREDITS	EXAMINATION SCHEME				
				MID TERM TEST	END SEMESTER EXAM	TERM WORK	SEMINAR PRESENTATION	TOTAL
Phd101	Research Methodology	6	6	20	80	--	--	100
Phd102	Course suggested by Guide*	6	6	20	80	--	--	100
Phd103	Seminar	-	4	-	-	50	50	100
Total		12	16	40	160	50	50	300

Grading of Research Candidates Performance

Awarding of grades to research candidates based on their performance shall be done as per the applicable ordinances and regulations for undergraduate and Post graduate programs of Engineering under the Faculty of Technology. Semester Grade Point Index (SGPI) shall be also calculated based on the ordinances and regulations applicable for engineering programs under Faculty of Technology. Approved and recognized Research Centers shall prepare Phd course work grade card after successful completion of course work and issue to candidates and one copy to University concerned section for record.


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