



॥ नहि ज्ञानेन सदृशं पवित्रमिह विद्यते ॥  
DR. VITHALRAO VIKHE PATIL FOUNDATION'S

## Dr. VITHALRAO VIKHE PATIL COLLEGE OF ENGINEERING

Affiliated to SPPU, Pune ( ID. No. PU/AN/Engg./027/(1983)  
& recognized by A.I.C.T.E., New Delhi & Govt. of Maharashtra  
Accredited by NAAC, Bangalore



Ref: IT/Academic/2018-19/ 2931A

Date: 19/05/2018

To,  
Dr. P.N. Mahalle  
SKNCOE Pune  
BOS-IT Member  
Savitribai Phule Pune University,  
Pune- 411007.

### Subject: Suggestions for up gradation of TE(IT) 2019 Pattern Syllabus.

Respected Sir,

With reference to the above cited subject, currently we are referring TE(IT) 2015 pattern syllabus. For up gradation of TE 2015 pattern syllabus, we have taken curriculum feedback from our students, Alumni, Teachers and Employer.

We have analyzed all the feedback and prepared the summery of the same. The detail report is attached herewith for your kind information and necessary action for the up gradation of TE(IT) 2019 pattern syllabus.

Thank You,



*Deepak*  
*Dr. D. A. Vidhate*  
Head

Department of Information Technology.

Dept. of Information Technology  
Dr. V.K.P. College of Engineering  
Ahmednagar

*[Signature]*  
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

Ref.COE/2018/ 2931(A)

Date: 19/09/2018

To,  
Dr. P.N. Mahalle  
SKNCOE Pune  
BOS-IT Member  
Savitribai Phule Pune University,  
Pune- 411007

**Subject: Modification required in Proposed Database management System syllabus of TE (IT) 2019 Pattern.**

Respected Sir/Madam,

With reference to above subject, Syllabus of DBMS needs some changes like in first unit Relational algebra language is given but, this is old and theoretical language which is not used any more in today's Databases. So, need to omit this part from the syllabus.

Also, Normalization topic is added in 2<sup>nd</sup> unit along with the SQL language. It is need to make a separate unit for Normalization topic so that it should be elaborated properly.

And finally my suggestion is to make separate subject like Advance Database management system so that some advance topic will be added in it.

Hope these points may be implemented in proposed DBMS TE(IT) 2019 Pattern syllabus.

Thank You,



Your Faithfully,

Prof. Avinash A. Pund  
Asstt. Prof. in IT Dept,  
Dr. Vithalrao Vikhe Patil College of  
Engineering, Ahmednagar

PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

Date: 27/12/2018

To,  
Prof. Avinash A. Pund  
Asstt. Prof. in IT Dept.  
Dr. V.V.P. COEA.

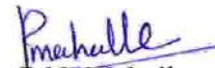
Dear Sir,

Received your letter regarding modification required in proposed subject Database management System.

Thank you for giving the inputs of DBMS subject. Definitely we will try to implement in upcoming syllabus revision. Meanwhile you can communicate with subject chairman Prof. Niraja Jain regarding modification required in the syllabus.

Thank you,

Yours Faithfully,



Dr. P.N. Mahalle  
SKNCOE Pune  
BOS-JT Member  
Savitribai Phule Pune University,  
Pune- 411007



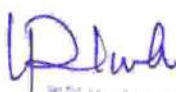
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

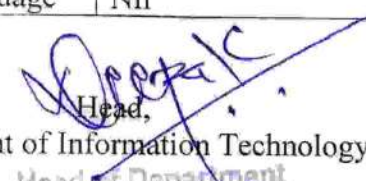
## Consolidated Report on Syllabus modification

Feedback was taken from the stakeholder such as students, teacher, alumni, employers and suggestion on updating of curriculum of TE(IT) 2015 pattern in to TE(IT) 2019 pattern w.e.f. 2021-22 is mentioned below for convening it to SPPU, Pune an affiliated University.

Sr. No.	Course Name	Topic/Subject to be added with reason	Topic/Subject to be omitted with reason
01.	Theory of Computation	No addition required	Nil
02.	Database Management Systems	There should be addition of some advance concept like Bigdata,hadoop, Cloud based Db etc	No need of Relational Algebra & Embedded SQL
03.	Software Engineering &Project Management	No addition required	Nil
04.	Operating System	Page replacement algorithm should be added. Introduction of System Programming should be added. Case study of any one OS required.	Nil
05.	Human-Computer Interaction	Arrangement of Unit Sequence HCI models should be available before Design Process. Need to add Future scope/Trends of HCI	Nil
06.	Computer Network Technology	Need to add some Security Concepts	Network layer and Transport layer (already available in SE syllabus)
07.	Systems Programming	No addition required	Nil
08.	Design and Analysis of Algorithms	Need to add some advance algorithm	Nil
09.	Cloud Computing	Practical/Term work should be added.	Nil
10.	Data Science & Big Data Analytics	No addition required	Nil
11.	Software Laboratory- III	Need to add application oriented subject with practical like Full stack development, App development, Web application development etc	Nil
12.	Seminar	Project based seminar should be added in 1 <sup>st</sup> semester instead if 2 <sup>nd</sup> semester	Nil
13.	Audit Course	Addition of any one Foreign Language	Nil



  
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

  
Head,  
Department of Information Technology  
Head of Department  
Dept. of Information Technology  
Dr. V.V.P. College of Engineering  
Ahmednagar

## Department of Civil Engineering

### Consolidated Report on syllabus up gradation



**Dr. Vithalrao Vikhe Patil College of Engineering,  
Ahmednagar  
Department of Civil Engineering**



#### Consolidated Report on syllabus up gradation

Feedback was taken from the stakeholder such as students, teacher, alumni, employers and suggestion on updating of curriculum of TE Civil 2015 pattern in to TE Civil 2019 pattern wef. From 2021-22 is mentioned below for convening it to SPPU, Pune an affiliated university.

Sr. No.	Course Name	Topic/Subject to be added with reason	Topic/Subject to be omitted with reason
1.	Hydrology and Water resource Engg.	Brief introduction of Govt. organization like IMD,CWPS, MERE, CDD,CWC and QGIS software application added.	Nil
2.	Infrastructure Engineering and Construction Techniques	Term Work should be added	Nil
3.	Structural Design-I	There should be addition of software assessments.	Nil
4.	Structural Analysis-II	Structural analysis –I and II can be merged in to one subject and Internship is required for the same	No need to Structural Analysis –I & II
5.	Fluid Mechanics-II	Consider as elective course in credit system.	Nil
6.	Employability Skills Developments	No addition required	Nil
7.	Advanced Surveying	There should be addition of QGIS software practicals.	Nil
8.	Project Management and Engineering Economics	No addition required	Nil
9.	Foundation Engineering	No addition required	Nil
10.	Structural Design-II	There should be addition of Slab and Beam type footing	No need of analysis of beam using working stress methods.
11.	Environmental Engineering-I	Jal Jeevan Mission and its necessity in rural area , Amrut yojana for development of society and infrastructure	Nil
12.	Seminar	No addition required	Nil

Head,  
Department of Civil Engg.



PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar



Ref. COE/ 2019/

Date:

To,

Dr. Pravin Dinkar Nemade  
Member Board of Study (BOS)  
Savitribai Phule Pune University, Pune.

**Subject: Modification required in Proposed Environmental Engineering -I Syllabus.  
(Third Year syllabus 2019 Patterns)**

Respected Sir,

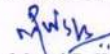
With reference to above subject syllabus of Environmental Engineering-I need major revision. As first unit of Env. Engg-I contain the topic like air pollution, noise pollution, solid waste management. Basically, the content of noise pollution, air pollution, and solid waste management has been covered in first year audit course. So, need to omit this part from the syllabus.

Also, it is need to add current points such as Jal Jeevan Mission and its necessity in rural area. AMRUT YOJANA for development of society and infrastructure. Other than the conventional water treatment it is need to add advance treatment technology to treat the water as day by day there is deficiency of water.

Hope these points may be added in proposed Environmental Engineering -I Syllabus.  
(Third Year syllabus 2019 Patterns).

Thank you,

Your Faithfully



Dr. Manoj P. Wagh  
Professor in Civil Engineering  
Dr. Vithalrao Vikhe Patil  
College of Engineering



  
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

Date: 20/7/2018

To,  
Dr. Manoj P. Wagh  
Professor in Civil Engineering  
Dr. Vithalrao Vikhe Patil  
College of Engineering

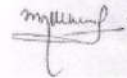
Dear Sir,

Received your letter regarding modification required in proposed subject Environmental Engineering -I.

Thank you for giving the inputs for the subject Environmental Engineering -I. definitely we will try to implement in upcoming syllabus revision. Meanwhile you can contact and send email to subject chairman Dr. M. V. Jadhav regarding modification required in the syllabus.

Thank you,

Your Faithfully



Dr. Pravin Dinkar Nemade  
Member Board of Study (BOS)  
Savitribai Phule Pune University, Pune



  
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmदनगर





### Consolidated Report on Syllabus modification

Feedback was taken from the stakeholder such as students, teacher, alumni, employers and suggestion on updating of curriculum of TE(Electrical) 2015 pattern in to TE(Electrical) 2019 pattern w.e.f. 2021-22 is mentioned below for convening it to SPPU, Pune an affiliated University.

Sr. No.	Course Name	Topic/Subject to be added with reason	Topic/Subject to be omitted with reason
1.	Industrial and Technology Management	No addition required	Nil
2.	Advance Microcontroller and its Applications	There should be addition of some serial communication protocol as SPI and MODBUS and Basics of IOT	No need of C concept in this subject because it is in FMA subject.
3.	Electrical Machine II	No addition required	Nil
4.	Power Electronics	Application of speed control of 3 phase Induction motor should be added.	Nil
5.	Electrical Installation, maintenance and Testing	Arrangement of some topics or Unit Sequence should be modify before Design Process. Need to merge some topics	Nil
6.	Seminar & Technical Communication	Need to give more information about seminar report & its content	Nil
7.	Power System II	No addition required	Nil
8.	Control System I	Need to add basics digital control System	No need of Non linear system & compensator design because we are replacing analog system to digital system
9.	Utilization of Electrical Energy	No addition required	Nil
10.	Design of Electrical Machine	All design sheet should draw in CAD or Eplanner Software	Nil
11.	Energy Audit & management	No addition required	Nil
12.	Electrical Workshop	No addition required	Nil
13.	Audit Course	Addition of any one Foreign Language	Nil



*(Signature)*  
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

*(Signature)*  
Department of Electrical Engineering.

॥ नहि ज्ञानेन सदृशं पवित्रमिह विद्यते ॥

PADMASHREE DR. VITHALRAO VIKHE PATIL FOUNDATION'S

**PADMASHREE DR. VITHALRAO VIKHE PATIL  
COLLEGE OF ENGINEERING**

Vadgaon Gupta, Vilad Ghat, Post.- M.I.D.C., Ahmednagar - 414 111. (M.S.) INDIA.

Approved by A.I.C.T.E., New Delhi & Govt. of Maharashtra

Affiliated to Savitribai Phule Pune University (Formerly University of Pune) (ID.No. Pu/AN/Engg./027/1983)

Estt. 1982



Phone : 0241 - 2777296/2779496

Fax : 0241-2777533

Email : prin\_coea@yahoo.com

Website : <http://www.enggnagar.com>

*The National Board of Accreditation (NBA), New Delhi has been accredited U.G. Courses in Civil, Mechanical, Electronics & Telecommunication and Instrumentation & Control Engineering*

Ref: IT/Academic/2018-19/ 226

Date: 13/08/2018

To,  
Dr. B. E. Kushare,  
BOS Member,  
Electrical Engineering,  
Savitribai Phule Pune University,  
Pune- 411007.

Subject: Suggestions for up gradation of TE(Electrical) 2019 Pattern Syllabus.

Respected Sir,

With reference to the above cited subject, currently we are referring TE(Electrical) 2015 pattern syllabus. For up gradation of TE 2015 pattern syllabus, we have taken curriculum feedback from our students, Alumni, Teachers and Employer.

We have analyzed all the feedback and prepared the summery of the same. The detail report is attached herewith for your kind information and necessary action for the up gradation of TE(Electrical) 2019 pattern syllabus.

Thank You.

Head,  
Department of Electrical Engineering.



PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

Ref.COE/2019/ 238

Date: 13/06/18

To,  
Dr. B. E. Kushare,  
Member Board of Study (BOS)  
Savitribai Phule Pune University, Pune.

Subject: **Modification required in Proposed Advance Microcontroller & its Application syllabus of TE (Electrical) 2019 Pattern.**

Respected Sir/Madam,

With reference to above subject, Syllabus of Advance Microcontroller & its Application needs some changes like Embedded C concept is given but, this is already mention in Subject Fundamental of Microcontroller & its Application. So, need to omit this part from the syllabus.

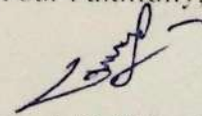
Also, need to add GSM or IOT concept related to Electrical Engineering. It is need to make a separate unit for same so that it should be elaborated properly.

And finally, my suggestion is to make separate subject like IOT & its Application so that some advance topic will be added in it.

Hope these points may be implemented in proposed Advanced Microcontroller & its Applications TE(Electrical) 2019 Pattern syllabus.

Thank You,

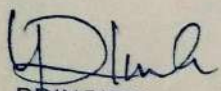
Your Faithfully,



Prof. Ganesh K. Shirsat

Asstt. Prof. In Elect. Dept,  
Dr. Vithalrao Vikhe Patil College of  
Engineering, Ahmednagar



  
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

Date:

Date:20/06/18

To,  
Prof. Ganesh K Shirsat  
Asstt. Prof. In Elect. Dept.  
Dr. V.V.P. COEA.

Dear Sir,

Received your letter regarding modification required in proposed subject Advanced Microcontroller & its.

Thank you for giving the inputs of Advanced Microcontroller & its subject. Definitely we will try to implement in upcoming syllabus revision. Meanwhile you can communicate with subject chairman Prof. P. P. Mahajan regarding modification required in the syllabus.

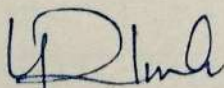
Thank you,

Yours Faithfully,



Dr. B. E. Kushare,  
Member Board of Study(BOS)  
Savitribai Phule Pune University,Pune



  
PRINCIPAL  
Dr. Vithalrao Vikhe Patil  
College of Engineering  
Ahmednagar

Savitribai Phule Pune University  
**FACULTY OF ENGINEERING**  
**T.E. Electrical Engineering (2015 Course)**  
 (w.e.f. 2017-2018)

SEMESTER-I													
Sr. No	Subject Code	Subject Title	Teaching Scheme			Examination Scheme					Total Marks	Credit	
			Th	Pr.	Tu.	PP		TW	PR	OR		TH/TU	PR+OR
						In Sem	End Sem						
1	311121	<u>Industrial and Technology Management</u>	03	--	--	30	70	--	--	--	100	03	--
2	303141	<u>Advance Microcontroller and its Applications</u>	04	02	--	30	70	--	--	50	150	04	01
3	303142	<u>Electrical Machines II</u>	04	02	--	30	70	--	50	--	150	04	01
4	303143	<u>Power Electronics</u>	04	02	--	30	70	--	50	--	150	04	01
5	303144	<u>Electrical Installation, Maintenance and Testing</u>	03	02	--	30	70	50	--	--	150	03	01
6	303145	<u>Seminar and Technical Communication</u>	--	02	--	--	--	50	--	--	50	--	01
	303152	<u>Audit Course III</u>											
<b>TOTAL</b>			<b>18</b>	<b>10</b>	<b>--</b>	<b>150</b>	<b>350</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>750</b>	<b>18</b>	<b>05</b>

SEMESTER-II													
Sr. No.	Subject Code	Subject Title	Teaching Scheme			Examination Scheme					Total Marks	Credit	
			Th.	Pr.	Tu	PP		TW	PR	OR		TH/TU	PR+OR
						In Sem	End Sem						
1.	303146	<u>Power System II</u>	04	02	--	30	70	--	50	--	150	04	01
2.	303147	<u>Control System I</u>	04	02	--	30	70	--	--	50	150	04	01
3.	303148	<u>Utilization of Electrical Energy</u>	03	--	--	30	70	--	--	--	100	03	--
4.	303149	<u>Design of Electrical Machines</u>	04	02	--	30	70	25	--	50	175	04	01
5.	303150	<u>Energy Audit and Management</u>	03	02	--	30	70	25	--	--	125	03	01
6.	303151	<u>Electrical Workshop</u>	--	02	--	--	--	50	--	--	50	--	01
	303153	<u>Audit Course IV</u>											
<b>Total</b>			<b>18</b>	<b>10</b>	<b>--</b>	<b>150</b>	<b>350</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>750</b>	<b>18</b>	<b>05</b>

Th: Theory lectures hours/week  
 Pr: Practical hours/week  
 Tu: Tutorial hours/week

TW: Term work  
 PR: Theory  
 OR: Oral  
 PP: Paper- In semester and End



*(Signature)*  
 Dr. Vithalrao Vithal Patil  
 College of Engineering  
 Anhednagar

**Savitribai Phule Pune University, Pune**  
**Syllabus: Third Year (TE) Electrical Engineering (2019 course)**  
**(w.e.f 2021-22)**

**SEMESTER-I**

Course code	Course Name	Teaching Scheme				Examination Scheme						Credit				
		Th	Pr	Tu	SEM /PW /IN	ISE	ESE	TW	PR	OR	Total	Th	Pr	Tu	SEM /PW /IN	Total
303141	Industrial and Technology Management	3	0	0	0	30	70	0	0	0	100	3	0	0	0	3
303142	Power Electronics	3	4#	0	0	30	70	0	50	0	150	3	2	0	0	5
303143	Electrical Machines-II	3	2	0	0	30	70	25	25	0	150	3	1	0	0	4
303144	Electrical Installation Design and Condition Based Maintenance	3	4#	0	0	30	70	25	0	25	150	3	2	0	0	5
303145	Elective-I	3	0	0	0	30	70	0	0	0	100	3	0	0	0	3
303146	Seminar	0	0	0	1	0	0	50	0	0	50	0	0	0	1	1
303147	Audit course-V	2*	0	0	0	0	0	0	0	0	0	GRADE: PP/NP				0
<b>Total</b>		<b>15</b>	<b>10</b>	<b>0</b>	<b>1</b>	<b>150</b>	<b>350</b>	<b>100</b>	<b>75</b>	<b>25</b>	<b>700</b>	<b>15</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>21</b>
<b>303145: Elective-I</b>						<b>303147 : Audit Course-V</b>										
303145A : <u>Advanced Microcontroller and Embedded System</u>						303147A : <u>Energy storage systems</u>										
303145B : <u>Digital Signal Processing</u>						303147B : <u>Start-up &amp; Disruptive innovation</u>										
303145C : <u>Open Elective</u>																

**SEMESTER-II**

Course code	Course Name	Teaching Scheme				Examination Scheme						Credit				
		Th	Pr	Tu	SEM /PW /IN	ISE	ESE	TW	PR	OR	Total	Th	Pr	Tu	SEM /PW /IN	Total
303148	Power System-II	3	2	1	0	30	70	25	50	0	175	3	1	1	0	5
303149	Computer Aided Design of Electrical Machines	3	4#	0	0	30	70	50	0	25	175	3	2	0	0	5
303150	Control System Engineering	3	2\$	1\$	0	30	70	25	0	25	150	3	1	0	0	4
303151	Elective-II	3	0	0	0	30	70	0	0	0	100	3	0	0	0	3
303152	Internship	0	0	0	4	0	0	100	0	0	100	0	0	0	4	4
303153	Audit Course VI	2*	0	0	0	0	0	0	0	0	0	GRADE: PP/NP				0
<b>Total</b>		<b>12</b>	<b>8</b>	<b>2</b>	<b>4</b>	<b>120</b>	<b>280</b>	<b>200</b>	<b>50</b>	<b>50</b>	<b>700</b>	<b>12</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>21</b>
<b>303151: Elective-II</b>						<b>303153 : Audit Course-VI</b>										
303151A : <u>IoT and its Applications in Electrical Engineering</u>						303153A: <u>Ethical Practices for Engineers</u>										
303151B : <u>Electrical Mobility</u>						303153B : <u>Project Management</u>										
303151C: <u>Cybernetic Engineering</u>																
303151D: <u>Energy Management</u>																

#Practical consists of Part A & part B. PART A; Regular experiments & part B; to bridge the gap between theory & actual industrial practices. For subject 303144; there will be auto cad drawing on Electrical installation, Electrical wiring, cabling etc. For 303149, Part A, Regular drawing by hand & part B same drawing by AutoCAD.

\$ tutorial credit merged with Practical.

\* Conduct over and above these lectures.



*(Signature)*  
**PRINCIPAL**  
 Dr. Vithalrao Vikhe Patil  
 College of Engineering  
 Ahmednagar