

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY  
BELAGAVI**

**BE/B.TECH Scheme of Teaching and Examinations  
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)  
(Effective from the Academic Year 2018-2019)**

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI**  
**Scheme of Teaching and Examination 2018 – 19**  
**Outcome Based Education(OBE) and Choice Based Credit System (CBCS)**  
**(Effective from the academic year 2018 – 19)**

**III SEMESTER: B.E CHEMICAL ENGINEERING**

Sl. No	Course and Course Code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	BSC	18MAT31	Transform calculus, fourier series and Numerical techniques	Mathematics	2	2	--	03	40	60	100	3
2	PCC	18CH32	Chemical Process Calculations	Chemical	3	2	--	03	40	60	100	4
3	PCC	18CH33	Momentum Transfer	Chemical	3	0	--	03	40	60	100	3
4	PCC	18CH34	Mechanical Operations	Chemical	3	0	--	03	40	60	100	3
5	PCC	18CH35	Chemical Technology-I	Chemical	3	0	--	03	40	60	100	3
6	PCC	18CH36	Technical Chemistry	Chemistry	3	0	--	03	40	60	100	3
7	PCC	18CHL37	Momentum Transfer Lab	Chemical	--	2	2	03	40	60	100	2
8	PCC	18CHL38	Technical Chemistry Lab	Chemistry	--	2	2	03	40	60	100	2
9	HSMC	18KVK39/49	Vyavaharika Kannada (Kannada for communication)/	HSMC	--	2	--	--	100	--	100	1
		18KAK39/49	Aadalitha Kannada (Kannada for Administration)		--	--	--	--				
		OR	OR		1	--	--	02	40	60		
		18CPC39	Constitution of India, Professional Ethics and Cyber Law		Examination is by objective type questions							
<b>TOTAL</b>					<b>17</b>	<b>08</b>	<b>04</b>	<b>24</b>	<b>420</b>	<b>480</b>	<b>900</b>	<b>24</b>
					<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>			
					<b>18</b>	<b>10</b>		<b>26</b>	<b>360</b>	<b>540</b>		

**Note:** BSC: Basic Science, PCC: Professional Core, HSMC: Humanity and Social Science, NCMC: Non-credit mandatory course.

18KVK39 Vyavaharika Kannada (Kannada for communication) is for non-kannada speaking, reading and writing students and 18KAK39 Aadalitha Kannada (Kannada for Administration) is for students who speak, read and write kannada.

**Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs**

10	NCMC	18MATDIP31	Additional Mathematics - I	Mathematics	02	01	--	03	40	60	100	0
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(a) The mandatory non – credit courses Additional Mathematics I and II prescribed for III and IV semesters respectively, to the lateral entry Diploma holders admitted to III semester of BE/B.Tech programs, shall attend the classes during the respective semesters to complete all the formalities of the course and appear for the University examination. In case, any student fails to register for the said course/ fails to secure the minimum 40 % of the prescribed CIE marks, he/she shall be deemed to have secured F grade. In such a case, the students have to fulfill the requirements during subsequent semester/s to appear for SEE.

(b) These Courses shall not be considered for vertical progression, but completion of the courses shall be mandatory for the award of degree.

**Courses prescribed to lateral entry B.Sc degree holders admitted to III semester of Engineering programs**

Lateral entrant students from B.Sc. Stream, shall clear the non-credit courses Engineering Graphics and Elements of Civil Engineering and Mechanics of the First Year Engineering Programme. These Courses shall not be considered for vertical progression, but completion of the courses shall be mandatory for the award of degree.

**AICTE Activity Points to be earned by students admitted to BE/B.Tech/B. Plan day college programme (For more details refer to Chapter 6, AICTE Activity Point Programme, Model Internship Guidelines):**

Over and above the academic grades, every Day College regular student admitted to the 4 years Degree programme and every student entering 4 years Degree programme through lateral entry, shall earn 100 and 75 Activity Points respectively for the award of degree through AICTE Activity Point Programme. Students transferred from other Universities to fifth semester are required to earn 50 Activity Points from the year of entry to VTU. The Activity Points earned shall be reflected on the student's eighth semester Grade Card.

The activities can be spread over the years, anytime during the semester weekends and holidays, as per the liking and convenience of the student from the year of entry to the programme. However, minimum hours' requirement should be fulfilled. Activity Points (non-credit) have no effect on SGPA/CGPA and shall not be considered for vertical progression.

**In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.**

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI**  
**Scheme of Teaching and Examination 2018 – 19**  
**Outcome Based Education(OBE) and Choice Based Credit System (CBCS)**  
**(Effective from the academic year 2018 – 19)**

**IV SEMESTER: B.E CHEMICAL ENGINEERING**

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	BSC	18MAT41	Mathematics (Title as per the decision of BoS in Sciences)	Mathematics	2	2	--	03	40	60	100	3
2	PCC	18CH42	Chemical Engg. Thermodynamics	Chemical	3	2	--	03	40	60	100	4
3	PCC	18CH43	Chemical Technology-II	Chemical	3	0	--	03	40	60	100	3
4	PCC	18CH44	Material Science	Chemical	3	0	--	03	40	60	100	3
5	PCC	18CH45	Process Heat Transfer	Chemical	3	0	--	03	40	60	100	3
6	PCC	18CH46	Instrumental Analysis	Chemistry	3	0	--	03	40	60	100	3
7	PCC	18CHL47	Chemical Engg. Drawing Lab	Chemical	--	2	2	03	40	60	100	2
8	PCC	18CHL48	Mechanical Operations Lab	Chemical	--	2	2	03	40	60	100	2
9	HSMC	18KVK39/49	Vyavaharika Kannada (Kannada for communication)/	HSMC	1	--	--	--	100	--	100	1
		18KAK39/49	Aadalitha Kannada (Kannada for Administration)									
		<b>OR</b>										
		18CPC49	Constitution of India, Professional Ethics and Cyber Law									
<b>TOTAL</b>					<b>17</b>	<b>08</b>	<b>04</b>	<b>24</b>	<b>420</b>	<b>480</b>	<b>900</b>	<b>24</b>
					<b>OR</b>	<b>OR</b>		<b>OR</b>	<b>OR</b>	<b>OR</b>		
					<b>18</b>	<b>10</b>		<b>26</b>	<b>360</b>	<b>540</b>		

**Note:** BSC: Basic Science, PCC: Professional Core, HSMC: Humanity and Social Science, NCMC: Non-credit mandatory course.

18KVK39/49 Vyavaharika Kannada (Kannada for communication) is for non-kannada speaking, reading and writing students and 18KAK39/49 Aadalitha Kannada (Kannada for Administration) is for students who speak, read and write kannada.

**Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs**

10	NCMC	18MATDIP41	Additional Mathematics - II	Mathematics	02	01	--	03	40	60	100	0
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((a)The mandatory non – credit courses Additional Mathematics I and II prescribed for III and IV semesters respectively, to the lateral entry Diploma holders admitted to III semester of BE/B.Tech programs, shall attend the classes during the respective semesters to complete all the formalities of the course and appear for the University examination. In case, any student fails to register for the said course/ fails to secure the minimum 40 % of the prescribed CIE marks, he/she shall be deemed to have secured F grade. In such a case, the students have to fulfill the requirements during subsequent semester/s to appear for SEE.

(b) These Courses shall not be considered for vertical progression, but completion of the courses shall be mandatory for the award of degree.

**Courses prescribed to lateral entry B.Sc. degree holders admitted to III semester of Engineering programs**

Lateral entrant students from B.Sc. Stream, shall clear the non-credit courses Engineering Graphics and Elements of Civil Engineering and Mechanics of the First Year Engineering Programme. These Courses shall not be considered for vertical progression, but completion of the courses shall be mandatory for the award of degree.

**AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.**

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**V SEMESTER: B.E CHEMICAL ENGINEERING**

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	HSMC	18CH51	Management and Entrepreneurship	HSMC/Chemical	2	2	--	03	40	60	100	3
2	PCC	18CH52	Mass Transfer Operations-I	Chemical	3	2	--	03	40	60	100	4
3	PCC	18CH53	Chemical Reaction Engineering-I	Chemical	3	2	--	03	40	60	100	4
4	PCC	18CH54	Chemical Equipment Design	Chemical	3	--	--	03	40	60	100	3
5	PCC	18CH55	Industrial Pollution Control	Chemical	3	--	--	03	40	60	100	3
6	PCC	18CH56	Biochemical Engineering	Chemical	3	--	--	03	40	60	100	3
7	PCC	18CHL57	Heat Transfer Lab	Chemical	--	2	2	03	40	60	100	2
8	PCC	18CHL58	Pollution Control and Instrumental Analysis Lab	Chemical	--	2	2	03	40	60	100	2
9	HSMC	18CIV59	Environmental Studies	Civil/ Environmental	1	--	--	02	40	60	100	1
				[Paper setting: Civil Engineering Board]								
<b>TOTAL</b>					<b>18</b>	<b>10</b>	<b>04</b>	<b>26</b>	<b>360</b>	<b>540</b>	<b>900</b>	<b>25</b>

**Note:** PCC: Professional Core, HSMC: Humanity and Social Science.

**AICTE activity Points:** In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

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**VI SEMESTER: B.E CHEMICAL ENGINEERING**

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination			Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks		Total Marks
					L	T	P					
1	PCC	18CH61	Chemical Reaction Engineering -II	Chemical	3	2	--	03	40	60	100	4
2	PCC	18CH62	Mass Transfer Operations-II	Chemical	3	2	--	03	40	60	100	4
3	PCC	18CH63	Process Equipment Design and Drawing	Chemical	3	2	--	03	40	60	100	4
4	PEC	18CH64X	Professional Elective -1	Chemical	3	--	--	03	40	60	100	3
5	OEC	18CH65X	Open Elective -A	Chemical	3	--	--	03	40	60	100	3
6	PCC	18CHL66	Chemical Reaction Engg. Lab	Chemical	--	2	2	03	40	60	100	2
7	PCC	18CHL67	Mass Transfer Operations Lab	Chemical	--	2	2	03	40	60	100	2
8	MP	18CHMP68	Mini-project	Chemical	--	--	2	03	40	60	100	2
9	INT	--	Internship	To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.								
<b>TOTAL</b>					<b>15</b>	<b>10</b>	<b>06</b>	<b>24</b>	<b>320</b>	<b>480</b>	<b>800</b>	<b>24</b>

**Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.**

Professional Elective -1			Open Elective -A*		
Course code under 18CH64X	Course Title	Course code under 18CH65X	Course Title		
18CH641	Oils and Fats Technology	18CH651	Process Waste Water Management		
18CH642	Petroleum Refining Engineering	18CH652	Process Air Pollution and Control		
18CH643	Chemical Plant Utilities and Safety	18CH653	Solid Waste Management in Process Industries		

\*Students can select any one of the open electives offered by any Department (Please refer to the list of open electives under 18CH65X).

Selection of an open elective is not allowed provided,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Adviser/Mentor.

**Mini-project work:**

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini- project can be assigned to an individual student or to a group having not more than 4 students.

**CIE procedure for Mini-project:**

**(i) Single discipline:** The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the Mini-project work, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

**(ii) Interdisciplinary:** Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college.

The CIE marks awarded for the Mini-project, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

**SEE for Mini-project:**

**(i) Single discipline:** Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.

**(ii) Interdisciplinary:** Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

**Internship:** All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements.

**AICTE activity Points:** In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

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**VII SEMESTER: B.E CHEMICAL ENGINEERING**

Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination			Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks		Total Marks
					L	T	P					
1	PCC	18CH71	Computer Applications and Modeling	Chemical	3	--	--	03	40	60	100	3
2	PCC	18CH72	Process Control and Instrumentation	Chemical	3	--	--	03	40	60	100	3
3	PEC	18CH73X	Professional Elective - 2	Chemical	3	--	--	03	40	60	100	3
4	PEC	18CH74X	Professional Elective - 3	Chemical	3	--	--	03	40	60	100	3
5	OEC	18CH75X	Open Elective -B	Chemical	3	--	--	03	40	60	100	3
6	PCC	18CHL76	Computer Applications and Simulation Lab	Chemical	--	2	2	03	40	60	100	2
7	PCC	18CHP77	Process Control Lab	Chemical	--	2	2	03	40	60	100	2
8	Project	18XXP78	Project Work Phase - 1	Chemical	--	--	2	--	100	--	100	1
8	Internship	--	Internship	(If not completed during the vacation of VI and VII semesters, it has to be carried out during the intervening vacations of VII and VIII semesters )								
<b>TOTAL</b>					<b>17</b>	<b>04</b>	<b>04</b>	<b>18</b>	<b>340</b>	<b>360</b>	<b>700</b>	<b>20</b>

**Note:** PCC: Professional core, PEC: Professional Elective.

**Professional Elective - 2**

Course code under 18XX73X	Course Title
18CH731	Electro Chemical Technology
18CH732	Petrochemicals
18CH733	Fermentation Technology

**Professional Electives - 3**

**Open Elective –B\***

Course code under 18CH74X	Course Title	Course code under 18CH75X	Course Title
18CH741	Novel Separation Techniques	18CH751	Food Technology
18CH742	Chemical Process Integration	18CH752	Pulp and Paper Technology
18CH743	Pilot Plant and Scale-up Studies	18CH753	Petrochemical Engineering

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX75X).

Selection of an open elective shall not be allowed if,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

**Project work:**

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary project can be assigned to an individual student or to a group having not more than 4 students. In extraordinary cases, like the funded projects requiring students from different disciplines, the project student strength can be 5 or 6.

**CIE procedure for Project Work Phase - 1:**

(i) **Single discipline:** The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work phase -1, shall be based on the evaluation of the project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the Project report shall be the same for all the batch mates.

(ii) **Interdisciplinary:** Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable.

The CIE marks awarded for the project work phase -1, shall be based on the evaluation of project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

**Internship:** All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements

**AICTE activity Points:** In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI												
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(Effective from the academic year 2018 – 19)												
VIII SEMESTER: B.E CHEMICAL ENGINEERING												
Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical / Drawin	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	PCC	18CH81	Process Engineering. Economics and Management	Chemical	3	--	--	03	40	60	100	3
2	PEC	18CH82X	Professional Elective - 4	Chemical	3	--	--	03	40	60	100	3
3	Project	18CHP83	Project Work Phase - 2	Chemical	--	--	2	03	40	60	100	8
4	Seminar	18CHS84	Technical Seminar	Chemical	--	--	2	03	100	--	100	1
5	Internship	18CHI85	Internship	(Completed during the intervening vacations of VI and VII semesters and /or VII and VIII semesters.)				03	40	60	100	3
<b>TOTAL</b>					<b>06</b>	<b>--</b>	<b>04</b>	<b>15</b>	<b>260</b>	<b>240</b>	<b>500</b>	<b>18</b>
<b>Note: PCC: Professional Core, PEC: Professional Elective.</b>												
<b>Professional Electives - 4</b>												
<b>Course code under 18CH82X</b>		<b>Course Title</b>										
18CH821		Pharmaceutical Technology										
18CH822		Applied Mathematics in Chemical Engineering										
18CH823		Transport Phenomena										
<b>Project Work</b>												
<b>CIE procedure for Project Work Phase - 2:</b>												
<b>(i) Single discipline:</b> The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide. The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25.The marks awarded for the project report shall be the same for all the batch mates.												
<b>(ii) Interdisciplinary:</b> Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable. The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25.The marks awarded for the project report shall be the same for all the batch mates.												
<b>SEE for Project Work Phase - 2:</b>												
<b>(i) Single discipline:</b> Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.												
<b>(ii) Interdisciplinary:</b> Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.												
<b>Internship:</b> Those, who have not pursued /completed the internship shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.												
<b>AICTE activity Points:</b> In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card. Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).												

<b>B.E CHEMICAL ENGINEERING</b>					
<b>Outcome Based Education (OBE) and Choice Based Credit System (CBCS)</b>					
<b>SEMESTER - VI</b>					
<b>OPEN ELECTIVE - A</b>					
Course Code	18CH65X	CIE Marks	40		
Teaching Hours/Week (L:T:P)	(3:0:0)	SEE Marks	60		
Credits	03	Exam Hours	03		
Students can select any one of the open electives offered by other Departments except those that are offered by the parent Department (For syllabus, please refer to the concerned Programme syllabus book or VTU website vtu.ac.in may be visited.).					
Selection of an open elective shall not be allowed if,					
<ul style="list-style-type: none"> <li>• The candidate has studied the same course during the previous semesters of the programme.</li> <li>• The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.</li> <li>• A similar course, under any category, is prescribed in the higher semesters of the programme.</li> </ul>					
Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.					
SI NO	Board and the Department offering the Electives		Course		Course Title
			SI No	Code under 18XX65X	
1.	CH	Chemical Engineering Board Department of Chemical Engineering	1	18CH651	Process Waste Water Management
			2	18CH652	Process Air Pollution and Control
			3	18CH653	Solid Waste Management in Process Industries

<b>B.E CHEMICAL ENGINEERING</b>					
<b>Outcome Based Education (OBE) and Choice Based Credit System (CBCS)</b>					
<b>SEMESTER - VII</b>					
<b>OPEN ELECTIVE - B</b>					
Course Code	18CH75X	CIE Marks	40		
Teaching Hours/Week (L:T:P)	(3:0:0)	SEE Marks	60		
Credits	03	Exam Hours	03		
Students can select any one of the open electives offered by other Departments except those that are offered by the parent Department (For syllabus, please refer to the concerned Programme syllabus book or VTU website vtu.ac.in may be visited.).					
Selection of an open elective shall not be allowed if,					
<ul style="list-style-type: none"> <li>• The candidate has studied the same course during the previous semesters of the programme.</li> <li>• The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.</li> <li>• A similar course, under any category, is prescribed in the higher semesters of the programme.</li> </ul>					
Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.					
SI NO	Board and the Department offering the Electives		Course		Course Title
			SI No	code under 18XX75X	
1.	CH	Chemical Engineering Board Department of Chemical Engineering	1	18CH751	Food Technology
			2	18CH752	Pulp and Paper Technology
			3	18CH753	Petrochemical Engineering

