

**Modified E3 (R12) Curriculum for Dept. of Chemical Engineering (RKV Campus)**

**E1 Sem1**

Name of the Course	Credits
Mathematics I	4
Physics (Chemistry)	4
English for Communication (Mechanics)	3
Electrical Technology (Programming and Data Structures)	4
Introduction to Manufacturing process & WSP (Engineering Drawing and Graphics)	3
Physics Lab (Chemistry Lab)	2
Electrical Technology Lab (Programming and Data Structures Lab)	2
<b>Total Credits</b>	<b>22</b>

**E1 Sem2**

Name of the Course	Credits
Mathematics II	4
Physics (Chemistry)	4
Engineering Mechanics (English)	3
Programming & Data Structures (Electrical Technology)	4
Engineering Drawing and Graphics (Introduction to Manufacturing process & WSP)	3
Physics Lab (Chemistry Lab)	2
Programming & Data Structures Lab (Electrical Technology Lab)	2
<b>Total Credits</b>	<b>22</b>

**E2 Sem1**

Name of the Course	Credits
Fluid Mechanics	4
Chemical Process Calculations	4
Numerical Solutions of ordinary and partial differential equations	4
Basic Thermodynamics	4
Basic Electronics	4
Fluid Mechanics Lab	2
<b>Total Credits</b>	<b>22</b>

**E2 Sem2**

Name of the Course	Credits
Heat Transfer	4
Transform Calculus	4
Chemical Technology	4
Chemical Engineering Thermodynamics	4
Advanced Experimental (analytical ) methods in Chemical Engineering	4
Introduction to Software Tools Lab	2
Presentation skills	2
<b>Total Credits</b>	<b>24</b>

**E2 Summer Sem**

Name of the Course	Credits
Foundation of Management	2
Skill Development	2
<b>Total Credits</b>	<b>4</b>
<b>E3 Sem1</b>	
Name of the Course	Credits
Mass Transfer Operations-I	4
Introduction to Reaction Engineering	4
Mechanical Unit Operations	4
Instrumentation and Process Control	4
Mechanical Unit Operations Lab	2
Heat Transfer Lab	2
<b>Total Credits</b>	<b>20</b>
<b>E3 Sem2</b>	
Name of the Course	Credits
Elective + Lab	6
Elective + Lab	6
Elective	4
Free Elective	4
Mini Project	4
<b>Total Credits</b>	<b>24</b>
<b>E3 Summer Sem</b>	
Name of the Course	Credits
Summer Internship	4
<b>Total Credits</b>	<b>4</b>
<b>E4 Sem1</b>	
Name of the Course	Credits
Elective + Lab	6
Elective	4
Free Elective	4
Project	6
<b>Total Credits</b>	<b>20</b>
<b>E4 Sem2</b>	
Name of the Course	Credits
Elective	4
Elective	4
Free Elective	4
Project	6
Comprehensive Viva	2
<b>Total Credits</b>	<b>20</b>
<b>Grand Total Credits</b>	<b>182</b>

Mass Transfer II (Compulsory in E3S2)	4
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Chemical Reaction Engineering-II (Compulsory in E3S2)	4
Process Equipment Design (Compulsory in E3S2)	4
Mass Transfer II Lab (Compulsory in E3S2)	2
Chemical Reaction Engineering Lab (Compulsory in E3S2)	2
Transport Phenomena (Compulsory in E4S1)	4
Instrumentation and Process Control Lab (Compulsory in E4S1)	2