

Shree M. & N. Virani Science College (Autonomous), Rajkot
Industrial Chemistry Department
Scheme of Instruction & Examinations

Semester-I							
Subject Code	Course	Hrs. of Instruction	Exam Duration(Hrs)	Max. Marks			Credit
				CIE	SEE	Total	
Part - I							
18PICCC01	Core 1: (Fundamental) Industrial Stoichiometry & Momentum Transfer Operation	4	3	40	60	100	3
18PICCC02	Core 2: (Fundamental) Industrial Unit Operations	4	3	40	60	100	3
18PICCC03	Core 3: (Fundamental) Organic Synthesis & Disconnection Approach	4	3	40	60	100	3
18PICDI01	DSE –ID 1: <ul style="list-style-type: none"> • Industrial Environment Management OR • Drug Discovery & Development 	2	3	50	50	100	3
18PICCC04	Core Practical 1: FM, HTO, LLE, OS	12	12	80	120	200	6
Part - II							
18PICCE01	CEC-1 Scientific Writing & Chem Draw Tools	1		100			2
18PICCE02	*CEC- 2 STC/MOOC's/Competitive Exams/Professional Certification Courses						
Part – III							
18PVE01	#Value Education	1	Remarks				1
Total		28					21

* Relevant Self learning Short Term Course(STC)/ MOOC's / Competitive exams/Professional Certification Courses from choice approved by AC offered in semester 1 and evaluated at the end of semester 4.

Evaluated at the end of semester-II.

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Semester-II							
Subject Code	Course	Hrs. of Instruction	Exam Duration(Hrs)	Max. Marks			Credit
				CIE	SEE	Total	
Part - I							
18PICCC05	Core 4: (Fundamental) Heterocyclic Chemistry	3	3	40	60	100	3
18PICCC06	Core 5: (Advanced) Mechanical Operations	3	3	50	50	100	4
18PICCC07	Core 6: (Advanced) Technologies in Chemical Industries	3	3	50	50	100	4
18PICCC08	Core 7: (Advanced) Industrial Unit Processes & Reagents	3	3	50	50	100	4
18PICDI02	DSE –ID 2: • Statistical method OR • Natural Production Extraction & Isolation/ Biological science	2	3	50	50	100	3
18PICCC09	Core Practical 2: MO, NP, PCE, MS	12	12	80	120	200	6
	#Industrial Training	-	Remarks at the end of Sem-3				-
Part - II							
18PICCE02	*CEC- 2 : STC/MOOC's/Competitive exams/Professional Certification Courses		-				-
Part - III							
18PVE01	Value Education	1					1
Total		27					25

* Relevant Self learning Short Term Course(STC)/ MOOC's / Competitive exams/Professional Certification Courses from choice approved by AC offered in semester 1 and evaluated at the end of semester 4.

#Industrial training for atleast 4 week during II and III semester and will be evaluated in Sem- 3.

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Semester-III							
Subject Code	Course	Hrs. of Instruction	Exam Duration(Hrs)	Max. Marks			Credit
				CIE	SEE	Total	
Part - I							
18PICCC10	Core 8: (Advanced) Polymer Chemistry & Technology	3	3	50	50	100	4
18PICCC11	Core 9: (Application) Chemical Reaction Engineering	3	3	50	50	100	4
18PICCC12	Core 10: (Application) Instrumental Techniques of Analysis	3	3	50	50	100	4
18PICCC13	Core 11: Self study Industrial Safety & Management	1	3	50	50	100	3
18PICDC01	DSE-Core 1: Chemical Technology-1 Or Pharmaceutical Technology	5	3	40	60	100	4
18PICCC14	Core practical 3: CRE, PCT, ITA	8	10	60	90	150	4
18PICCC15	Industrial Training	-	Remarks				4 [^]
18PICCC16	Dissertations /Advance practical	2	-	-	-	-	5 [#]
18PICGE01	Generic Elective	2	3	100	-	100	2
Part - II							
18PICCE02	*CEC- 2 : STC/MOOC's/Competitive exams/Professional Certification Courses		-				-
Total		27					25

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Only for the student who take exit in Semester-3.

[^] Additional 4 credits to be awarded for industrial training above total 96 credits.

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Semester-IV							
Subject Code	Course	Hrs. of Instruction	Exam Duration(Hrs)	Max. Marks			Credit
				CIE	SEE	Total	
Part - I							
18PICCC17	Core 12: (Application) Process Dynamics & Control	4	3	50	50	100	4
18PICCC18	Core 13: (Application) Advance Organic Chemistry	4	3	50	50	100	4
18PICDC02	DSE Core - 2: Chemical Technology-2 Or Chemistry of Synthetic Drug	4	3	40	60	100	4
18PICCC16	Dissertations /Advance practical	12	6	60	90	150	11
Part - II							
18PICCE02	CEC- 2 : STC/MOOC's/Competitive exams/Professional Certification Courses		-				2
Total		24					25

* Relevant Self learning Short Term Course(STC)/ MOOC's / Competitive exams/Professional Certification Courses from choice approved by AC offered in semester 1 and evaluated at the end of semester 4.

TOTAL MARKS AND CREDIT DISTRIBUTION

S.N.	Part	Total Marks	Total Credit
1	Part I : Core, Self-Study, DSE-Core, DSE-ID, GE, Dissertation	2500	90
2	Part II CEC-I, CEC-II	100	4
3	Part III Value Education	-	2
4	Industrial Training	-	4
Total		2600	96+4 = 100