

Course Structure for P.G. Programme in Chemistry as per CBCS w.e.f. 2021

SEMESTER-I

1. Core Courses (CR):

Course No.	Title	Contact hours/Week	No. of Credits
CH21101CR	Inorganic Chemistry	(03L + 01T)	04
CH21102CR	Organic Chemistry	(03L + 01T)	04
CH21103CR	Physical Chemistry	(03L + 01T)	04
CH21104CR	Environmental Chemistry & Analytical Monitoring.	(01L + 01T)	02

2. Discipline Centric Electives (DCE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21105DCE	Laboratory Course in Chemistry -I	04 Lab Sessions of 03 hours each total 45 sessions	04
CH21106DCE	Symmetry & Group Theory	(01L + 01T)	02
CH21107DCE	IR, Raman & Electronic Spectroscopy	(01L + 01T)	02

3. Generic Electives (GE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21001GE	Surfactants and their Applications	(01L + 01T)	02

4. Open Elective Courses (OE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21001OE	Chemistry in Everyday Life	(01L + 01T)	02

SEMESTER-II

1. Core Courses (CR):

Course No.	Title	Contact hours/Week	No. of Credits
CH21201CR	Inorganic Chemistry	(03L + 01T)	04
CH21202CR	Organic Chemistry	(03L + 01T)	04
CH21203CR	Physical Chemistry	(03L + 01T)	04
CH21204CR	Green Chemistry	(01L + 01T)	02

2. Discipline Centric Elective (DCE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21205DCE	Laboratory Course in Chemistry -II	04 Lab Sessions of 03 hours each total 45 sessions	04
CH21206DCE	NMR & ESR Spectroscopy	(01L + 01T)	02
CH21207DCE	Solid State Chemistry	(01L + 01T)	02

3. Generic Elective Courses (GE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21002GE	Metal Ions in Living Systems	(01L + 01T)	02

4. Open Elective Course (OE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21002OE	Chemistry of Bio-molecules	(01L + 01T)	02

SEMESTER-III

1. Core Courses (CR):

Course No.	Title	Contact hours/Week	No. of Credits
CH21301CR	Selected Topics in Inorganic Chemistry	(03L + 01T)	04
CH21302CR	Organic Chemistry (Organic spectroscopy and heterocyclic chemistry)	(03L + 01T)	04
CH21303CR	Physical Chemistry	(03L + 01T)	04
CH21304CR	Non-Equilibrium Thermodynamics	(01L + 01T)	02

2. Discipline Centric Elective (DCE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21305DCE	Laboratory Course in Chemistry -III	04 Lab Sessions of 03 hours each total 45 sessions	04
CH21306DCE	Chromatographic Techniques	(01L + 01T)	02
CH21307DCE	Bio-Physical Chemistry	(01L + 01T)	02

3. Generic Elective (GE):-

Course No.	Title	Contact hours/Week	No. of Credits
CH21003GE	Bio-Organic Chemistry	(01L + 01T)	02

4. Open Elective Course (OE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21003OE	Medicinal Inorganic Chemistry	(01L + 01T)	02

SEMESTER-IV

1. (i) Core Courses (CR):

Course No.	Title	Contact hours/Week	No. of Credits
CH21401CR	Advanced Inorganic Chemistry	(03L + 01T)	04
CH21402CR	Advanced Organic Chemistry	(03L + 01T)	04
CH21403CR	Advanced Physical Chemistry	(03L + 01T)	04
CH21404CR	Project Seminar and Dissertation	(01L + 01T)	02

2. Discipline Centric Electives (DCE)**:

Course No.	Title	Contact hours/Week	No. of Credits
CH21405DCE	Lab Project in Chemistry	05 Lab Sessions of 03 Hours.	04
CH21406DCE	Inorganic Materials	(01L + 01T)	02
CH21407DCE	Supramolecular Chemistry	(01L + 01T)	02
CH21408 DCE	Medicinal Chemistry	(01L + 01T)	02
CH21409 DCE	Chemistry of Natural Products	(01L + 01T)	02
CH21410 DCE	Computational Chemistry and Advanced Quantum Chemistry	(01L + 01T)	02
CH21411DCE	Applied Electrochemistry	(01L + 01T)	02

Course No.	Title	Contact hours/Week	No. of Credits
CH21004GE	Synthetic Polymers and their Applications	(01L + 01T)	02
CH21005GE	Novel Materials	(01L + 01T)	02

3. Open Elective (OE):

Course No.	Title	Contact hours/Week	No. of Credits
CH21004OE	Food Chemistry	(01L + 01T)	02

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Students in 4th semester have to necessarily opt for two DCE courses offered by the same specialization to have the higher credit weightage from a particular specialization.