

# Scheme and Syllabus

## M.Sc. Chemistry

**IEC School of Basic & Applied Sciences**



Atal Shiksha Nagar (Kallujhanda), P.O.  
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**1<sup>st</sup> Semester**

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
MCH-101	Inorganic Chemistry -I	4	1	0	4	4.5	60	40	100
MCH-102	Organic Chemistry -I	4	1	0	4	4.5	60	40	100
MCH -103	Physical Chemistry -I	4	1	0	4	4.5	60	40	100
MCH-104/ MCH-105	Basic Mathematics*/ Remedial Biology*	4	0	0	4	4	60	40	100
MCH -151 P	Inorganic Chemistry Lab I	0	0	4	4	2	30	20	50
MCH -152 P	Organic Chemistry Lab I	0	0	4	4	2	30	20	50
MCH -153 P	Physical Chemistry Lab-I	0	0	4	4	2	30	20	50

**2<sup>nd</sup> Semester**

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
MCH-201	Inorganic Chemistry -II	4	1	0	4	4.5	60	40	100
MCH-202	Organic Chemistry -II	4	1	0	4	4.5	60	40	100
MCH-203	Physical Chemistry -II	4	1	0	4	4.5	60	40	100
MCH-204	Computer Programming Theory	4	0	0	4	4	60	40	100
MCH -251 P	Inorganic Chemistry Lab II	0	0	4	4	2	30	20	50
MCH -252 P	Organic Chemistry Lab II	0	0	4	4	2	30	20	50
MCH -253 P	Physical Chemistry Lab-II	0	0	4	4	2	30	20	50
MCH-254 P	Computer-Lab	0	0	4	4	2	30	20	50

**3<sup>rd</sup> Semester**

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
MCH-301	Inorganic Chemistry -III	4	1	0	4	4.5	60	40	100
MCH-302	Organic Chemistry -III	4	1	0	4	4.5	60	40	100
MCH-303	Physical Chemistry - III	4	1	0	4	4.5	60	40	100
MCH-304	Chemistry for Life and Environmental Science	4	0	0	4	4	60	40	100
MCH-305	Seminar	0	0	0	0	1	0	100	100
MCH -351 P	Inorganic Chemistry Lab III	0	0	4	4	2	30	20	50
MCH -352 P	Organic Chemistry Lab III	0	0	4	4	2	30	20	50
MCH -353 P	Physical Chemistry Lab-III	0	0	4	4	2	30	20	50

**4th Semester**

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
*	Elective (Disciplinary specific)	4	0	0	4	4	60	40	100
*	Elective (Disciplinary specific)	4	0	0	4	4	60	40	100
MCH-403	Dissertation	0	0	15	40	12	50	50	100

S.No	Disciplinary specialization		Code
A	<b>Inorganic Chemistry</b>		
	1	Advanced Organometallics*	MCH -401E-I
	2	Inorganic photochemistry & Polymeric* compounds	MCH-402E-I
B	<b>Organic Chemistry</b>		
	1.	Medicinal Chemistry*	MCH-401E-O
	2.	Natural Products*	MCH -402E-O
C	<b>Physical Chemistry</b>		
	1	Advanced Quantum Chemistry*	MCH -401E-P
	2	Solid State Chemistry*	MCH -402E-P

**L** – Lecture; **T** – Tutorial; **P** – Practical; **CH** – Contact hour; **CP**– Credits points; **Int. A**–Internal assessment; **ESE** – End-semester exam.