



## Study Plan for ID 653 XXX XX23 Material Chemistry (127 Credit)

First year							
Semester 1 (Aug-Dec 2565)				Semester 2 (Jan-May 2566)			
Code	Subject	Credits	Condition	Code	Subject	Credits	Condition
2301107	CALCULUS I	3		2301108	CALCULUS II	3	PRER 2301107
2302107	COMP APP CHEM	1		2302102	GEN CHEM II	3	PRER 2302101 OR C.F.
2302101	GEN CHEM I	3		2303109	GENERAL BIOLOGY	3	
2302103	GEN CHEM LAB	1		2303110	GEN BIO LAB	1	
5503111	ENG COMM SCI I	3		2304151	ESSENTIAL PHYS	3	
xxxxxxx	Language:Non-native	3		2304191	PHYSICS LAB FOR CHEM	1	
xxxxxxx	Gen Ed <sup>1</sup>	3		5503122	ENG COMM SCI II	3	PRER 5500181 OR 5503111
				xxxxxxx	Gen Ed	3	
<b>Total</b>		<b>17</b>		<b>Total</b>		<b>20</b>	

Second year							
Semester 1 (Aug-Dec 2566)				Semester 2 (Jan-May 2567)			
Code	Subject	Credits	Condition	Code	Subject	Credits	Condition
2301286	PROBABILITY AND STATISTICS	3	PRER 2301113 OR 2301107 OR 2301117	2302203	ORG CHEM LAB	1	PRER 2302103
2302104	CHEM HAZ MGT	3		2302206	ANAL CHEM II	3	PRER 2302205 OR C.F.
2302204	INORG CHEM	3	PRER 2302102	2302272	ORG CHEM II	3	PRER 2302271 OR C.F.
2302205	ANAL CHEM I	3	PRER 2302102	2302232	PHYS CHEM II	3	PRER 2302231 OR C.F.
2302231	PHYS CHEM I	3	PRER 2302112 OR 2302102 OR 2302105 OR C.F.	2302305	PRAC CHEM	1	PRER 2302103 and 2302205 OR C.F.
2302271	ORG CHEM I	3	PRER 2302112 OR 2302102 OR C.F.	2302393	CHEM INFO TECH	2	
5503213	COMMUNICATION AND PRESENTATION SKILL FOR SCIENCE	3	PRER 5503122	2302281	FUND MAT CHEM	3	
				xxxxxxx	Gen Ed	3	
<b>Total</b>		<b>21</b>		<b>Total</b>		<b>19</b>	

Third year							
Semester 1 (Aug-Dec 2567)				Semester 2 (Jan-May 2568) <sup>2</sup>			
Code	Subject	Credits	Condition	Code	Subject	Credits	Condition
2302303	SPECT CHEM	2	PRER 2302202 OR 2302272	2302302	INTEG CHEM LAB	2	PRER 2302305
2302384	MACROMOL CHEM	3	PRER 2302202 OR 2302272	2302307	INTER SCI SOC PROJ	4	COREQ 2302399
2302385	MAT ID	3		2302334	SURF COLLD CHEM (Module)	2	
2302480	BIOPOLYMER	2		2302399	PROJECT PROPOSAL <sup>3</sup>	1	
2302380	INORGANIC MATERIALS	2	PRER 2302204 OR C.F.	xxxxxxx	Elective (Module)	3	
xxxxxxx	Gen Ed	3		xxxxxxx	Elective (Module)	3	
xxxxxxx	Gen Ed	3					
<b>Total</b>		<b>18</b>		<b>Total</b>		<b>15</b>	

Fourth year							
Semester 1 (Aug-Dec 2568)				Semester 2 (Jan-May 2569)			
Code	Subject	Credits	Condition	Code	Subject	Credits	Condition
2302402	APP CHEM PROJ	2		2302301	SEMINAR	1	
				2302352	IND CHEM TECH	3	
				2302404	CURR PROB APP CHEM	2	
				xxxxxxx	Gen Ed	3	
				xxxxxxx	Free Elective	3	
				xxxxxxx	Free Elective	3	
<b>Total</b>		<b>2</b>		<b>Total</b>		<b>15</b>	

**Remark:**

- 'Gen Ed' refers to general education courses in these 5 categories- Social Science, Humanities, Sci&Math, Interdisciplinary, and Special Groups. All of them must be offered for International Programs by General Education Center.
- Only in the 2<sup>nd</sup> semester of 3<sup>rd</sup> year, the semester is splitted in to two halves. In the first half (*Jan-Feb*), students must attend only 2302307 class. Then, in *Mar-May*, students can attend the rest of their registered courses in that semester.
- Project Proposal course (2302399) is registered in the 2<sup>nd</sup> semester of 3<sup>rd</sup> year but the course span from *Aug 2567* till the end of the 2<sup>nd</sup> semester.
- Courses in blue are placed in *suggested* semesters. They, however, can be taken in different semester as seen fit by the students and their academic advisors.

**First year**

Semester 1 (Aug-Dec 2565)				Semester 2 (Jan-May 2566)			
Code	Subject	Credits	Condition	Code	Subject	Credits	Condition
2301107	CALCULUS I	3		2301108	CALCULUS II	3	PRER 2301107
2302107	COMP APP CHEM	1		2302102	GEN CHEM II	3	PRER 2302101 OR C.F.
2302101	GEN CHEM I	3		2303109	GENERAL BIOLOGY	3	
2302103	GEN CHEM LAB	1		2303110	GEN BIO LAB	1	
5503111	ENG COMM SCI I	3		2304151	ESSENTIAL PHYS	3	
xxxxxxx	Language:Non-native	3		2304191	PHYSICS LAB FOR CHEM	1	
xxxxxxx	Gen Ed <sup>1</sup>	3		5503122	ENG COMM SCI II	3	PRER 5500181 OR 5503111
				xxxxxxx	Gen Ed	3	
<b>Total</b>			<b>17</b>	<b>Total</b>			<b>20</b>

**Second year**

Semester 1 (Aug-Dec 2566)				Semester 2 (Jan-May 2567)			
Code	Subject	Credits	Condition	Code	Subject	Credits	Condition
2301286	PROBABILITY AND STATISTICS	3	PRER 2301113 OR 2301107 OR 2301117	2302203	ORG CHEM LAB	1	PRER 2302103
2302104	CHEM HAZ MGT	3		2302206	ANAL CHEM II	3	PRER 2302205 OR C.F.
2302204	INORG CHEM	3	PRER 2302102	2302272	ORG CHEM II	3	PRER 2302271 OR C.F.
2302205	ANAL CHEM I	3	PRER 2302102	2302305	PRAC CHEM	1	PRER 2302103 and 2302205 OR C.F.
2302231	PHYS CHEM I	3	PRER 2302102 OR 2302112 OR 2302105 OR C.F.	2302393	CHEM INFO TECH	2	
2302271	ORG CHEM I	3	PRER 2302112 OR 2302102 OR C.F.	2602171	BUS CPTS/ETHICS	3	
5503213	COMMUNICATION AND PRESENTATION SKILL FOR SCIENCE	3	PRER 5503122	xxxxxxx	Gen Ed	3	
				xxxxxxx	Gen Ed	3	
<b>Total</b>			<b>21</b>	<b>Total</b>			<b>19</b>

**Third year**

Semester 1 (Aug-Dec 2567)				Semester 2 (Jan-May 2568) <sup>2</sup>			
Code	Subject	Credits	Condition	Code	Subject	Credits	Condition
2302303	SPECT CHEM	2	PRER 2302202 OR 2302272	2302307	INTER SCI SOC PROJ	4	COREQ 2302399
2601120	FIN ACCTG	3		2302399	PROJECT PROPOSAL <sup>3</sup>	1	
2602313	MGT/ORGANIZATION	3		xxxxxxx	Elective (Module)	3	
2605311	PRIN MKTG	3		xxxxxxx	Elective (Module)	3	
2900111	ECONOMICS I	3					
3401250	BUSINESS LAW	2					
xxxxxxx	Gen Ed	3					
<b>Total</b>			<b>19</b>	<b>Total</b>			<b>11</b>

**Fourth year**

Semester 1 (Aug-Dec 2568)				Semester 2 (Jan-May 2569)			
Code	Subject	Credits	Condition	Code	Subject	Credits	Condition
2302402	APP CHEM PROJ	2		2302301	SEMINAR	1	
				2302352	IND CHEM TECH	3	
				2302404	CURR PROB APP CHEM	2	
				2302351	QUAL ASSCE SYS	3	
				xxxxxxx	Gen Ed	3	
				xxxxxxx	Free Elective	3	
				xxxxxxx	Free Elective	3	
<b>Total</b>			<b>2</b>	<b>Total</b>			<b>18</b>

**Remark:**

- 'Gen Ed' refers to general education courses in these 5 categories- Social Science, Humanities, Sci&Math, Interdisciplinary, and Special Groups. All of them must be offered for International Programs by General Education Center.
- Only in the 2<sup>nd</sup> semester of 3<sup>rd</sup> year, the semester is splitted in to two halves. In the first half (*Jan-Feb*), students must attend only 2302307 class. Then, in *Mar-May*, students can attend the rest of their registered courses in that semester.
- Project Proposal course (2302399) is registered in the 2<sup>nd</sup> semester of 3<sup>rd</sup> year but the course span from *Aug 2567* till the end of the 2<sup>nd</sup> semester.
- Courses in blue are placed in *suggested* semesters. They, however, can be taken in different semester as seen fit by the students and their academic advisors.