List of courses planned to be offered （Language courses and general courses are excluded.）

No.	Subject title	Cr.	Year	Compulsory	No.	Subject title	Cr.	Year	Compulsory
1	**Basic subjects of mathematics**				21	Data Visualization	2	3	
2	Mathematic A1 （Linear Algebra）	2	1	○	22	**Subjects of engineering (Chemistry, Life science)**			
3	Mathematic B1 （Basic Calculus）	2	1	○	23	Basic Chemistry	2	1	○
4	Mathematic C （Basic Statistics）	2	1	○	24	Analytical Chemistry	2	2	
5	Mathematics A2 （Abstract Linear Space）	2	2		25	Inorganic Chemistry	2	2	
6	Mathematics B2 （Multivariable Calculus）	2	2		26	Environmental Analytical Chemistry	2	2	
7	Probability Theory	2	2		27	Physical Chemistry	2	2	
8	**Basic subjects of informatics**				28	Organic Chemistry	2	2	
9	Basic Informatics	2	1	○	29	Inorganic Materials	2	3	
10	Data Structure and Algorithm	2	2		30	Organic Materials	2	3	
11	Information Security	2	3		31	Polymer Chemistry	2	3	
12	**Subjects related to data science**				32	Basic Biology	2	1	○
13	Regression Analysis	2	2		33	Biochemistry	2	2	
14	Bayesian Statistics	2	2		34	Biotechnology	2	2	
15	Time series Analysis	2	3		35	Bioinformatics	2	2	
16	Multivariate Analysis	2	3		36	Biopolymer	2	3	
17	Non-parametric Analysis	2	3		37	**Subjects of engineering (Physics, ME, EE, Systems)**			
18	Machine Learning	2	2		38	Basic Physics	2	1	○
19	Artificial Intelligence	2	2		39	Material Science	2	2	
20	Natural Language Processing	2	3		40	Electromagnetism	2	2	

List of courses planned to be offered（Language courses and general courses are excluded.）

No.	Subject title	Cr.	Year	Compulsory	No.	Subject title	Cr.	Year	Compulsory
41	Thermodynamics	2	2		61	Technical & Innovation Career Development	2	2	○
42	Energy Conversion	2	2		62	Law & Ethics in Technology	2	3	○
43	Applied Mathematics	2	2		63	**Seminar**			
44	Fundamentals of System Analysis	2	2		64	Seminar 1	4	4	○
45	Mathematical Optimization	2	2		65	Seminar 2	4	4	○
46	Safe and Environmental Management System	2	3		66	**Others**			
47	**Subjects of GX technologies built on DX foundations**				67	Academic Writing 1	2	2	○
48	Introduction to GX on DX	2	1	○	68	Academic Writing 2	2	2	○
49	Programing	2	1	○	69	Environmental Science	2	3	
50	GX on DX Lab. 1	2	2	○	70	Sustainable Development	2	3	
51	GX on DX Lab. 2	2	3	○	71				
52	Material Informatics (PBL)	2	2	○	72				
53	Theoretical Chemistry	2	3		73				
54	Theory-aided Molecular Design	2	3		74				
55	Medical Informatics	2	3		75				
56	Energy Management system	2	3		76				
57	Autonomous System Engineering	2	3		77				
58	**Subjects related to leadership and entrepreneurship**				78				
59	Internship	2	2	○	79				
60	Entrepreneurship	2	3	○	80				