DEPARTMENT OF CHEMICAL ENGINEERING

University of North Dakota

Program for Bachelor of Science in Chemical Engineering

For **DEDP** Students entering Fall Semester 2004 or later

FIRST YEAR

Fall Semester		Spring Semester	
Math 165 Calculus I*	4	Math 166 Calculus II*	4
●Chem 121/121L General Chem I*/Lab*	3/1	ChE 102 Introduction to Chemical Engineering	2
Engl 110 College Composition I*	3	●Chem 122/122L General Chem II*/Lab*	3/1
Arts/Humanities GER	3	Phys 251 University Physics I*	4
Social Science GER	3	Arts/Humanities GER	3
Semester Total	17	Semester Total	17

SECOND YEAR

Math 265 Calculus III*	4	Math 266 Elementary Differential Equations	3
ChE 201 Stoichiometry*	3	Phys 252 University Physics II*	4
●Chem 341/341L Organic Chemistry I/Lab	4/1	♦ChE 232 Chemical Engineering Laboratory I	2
Engl 125 Technical and Business Writing*†	3	ChE 206 Unit Operations in Chemical Engr	3
Econ 201 Principles of Microeconomics	3	Engr 201 Statics	3
		Advanced Chemical Science Elective	3
Semester Total	18	Semester Total	18

THIRD YEAR

ChE 301 Transport Phenomena	4	♦ChE 332 Chemical Engineering Laboratory III	2
♦ChE 331 Chemical Engineering Laboratory II	2	ChE 403 Chemical Engineering Thermodynamics.	4
ChE 333 Basic Experimental Strategies	1	ChE 405 Separations	3
Chem 465 Physical Chemistry II	3	EE 206 Electrical Engr Fundamentals	3
Engineering Science Elective	3	Engr 460 Engineering Economy	3
Advanced Chemical Science Elective	3	Technical Elective II	3
Semester Total	16	Semester Total	18

FOURTH YEAR

ChE 408 Chemical Process Dynamics	3	ChE 412 Chemical Engr Plant Design II	5
ChE 411 Chemical Engr Plant Design I	3	Cultural Elective	3
ChE 421 Chemical Engineering Reactor Design	3	Chemical Engineering Elective	3
♦ChE 431 Chemical Engineering Laboratory IV	3	Technical Elective I	3
Technical Elective II	3	Social Science GER	3
Semester Total	15	Semester Total	14

PROGRAM TOTAL 133

*Must be completed with grade of C or better.

†Engl 120 - College Composition II may be substituted.

● On-campus Chemistry Labs

♦ On-campus ChE Labs; completed in 3 2-week sessions (plus some outside work) of 3-credits/session.