

CHEMISTRY MAJOR AND CHEMICAL ENGINEERING DUAL DEGREE (COMPREHENSIVE)

Requirements

UW-Superior (UWS) and University of Minnesota, Duluth (UMD) have an articulation agreement where a student can complete a UWS Chemistry BS and a UMD Chemical Engineering BS ChE, by completing approximately 3 years of coursework at UWS and an additional 2 years at UMD.

Complete the UWS University Studies requirements (42 credits). (This will satisfy the UMD Liberal Education and advanced writing requirements.)

Code	Title	Hours
UWS core Chemistry courses (45 credits)		
CHEM 105	General Chemistry I ¹	5.00
CHEM 106	General Chemistry II	4.00
CHEM 107	Supplementary Problems in General Chemistry II ²	1.00
CHEM 305	Quant Analysis Lecture	3.00
CHEM 306	Quantitative Analysis Laboratory	2.00
CHEM 320	Organic Chemistry Lecture I	3.00
CHEM 321	Organic Chem Lecture II	3.00
CHEM 322	Organic Chemistry Lab I	1.00
CHEM 323	Organic Chemistry Lab II	1.00
CHEM 327	Molecular Spectroscopy I	1.00
MATH 240	Calculus and Analytic Geometry I ¹	4.00
MATH 241	Calculus and Analytic Geometry II	4.00
MATH 242	Calculus and Analytic Geometry III	4.00
PHYS 201	Calculus-Based Physics I ¹	5.00
PHYS 202	Calculus-Based Physics II	5.00

¹ Complete the course with a C+ or better.

² Recommended.

A Cumulative GPA of 3.0+ at the time of transfer to UMD.

Remaining UWS Chemistry major courses (12 credits) to be fulfilled by taking required UMD Chemical Engineering courses.

Code	Title	Hours
CHEM 345	Physical Chemistry Lect I	4.00
CHEM 360	Introduction to Biochemistry	3.00
CHEM 365	Descriptive Inorganic Chemistry	3.00
CHEM 497	Senior Seminar In Chemistry	1.00
CHEM 491	Senior Research	1.00-4.00

Notes:

- See the Articulation Agreement.
- It is recommended that students complete UMD ChE 2111 or 2211 *Material and Energy Balances* through cross-registration (<https://www.uwsuper.edu/academics/registrars-office/forms/>) during their third year at UWS.
- The remaining required UMD Chemical Engineering coursework is 58-59 credits.
- The UWS residency requirement (last 12 credits to be completed at UWS) is waived.
- Students must notify the UWS Registrar's office when their UMD Chemical Engineering degree is completed to have their UWS Chemistry Major conferred.