

Chemical Engineering (MS)

As the first predominantly Black university to offer the Ph.D. degree in chemistry, Howard has produced more African American chemists than any other chemistry department in the world and has one of the largest chemistry departments in the District of Columbia.

The Chemistry Department was preeminent in stimulating the transition of Howard from a small private undergraduate college to a large private university. Chemistry first offered the M.S. degree in chemistry in 1923, before there was a Graduate School at the University. Chemistry became the first department to award the Ph.D. degree at the University, in 1958.

An incoming graduate students should have the necessary undergraduate pre-requisite courses to do the Advanced Fundamentals in Chemical Engineering courses. An incoming student with an undergraduate Chemical Engineering major has typically taken these pre-requisite courses. If the student does not have an undergraduate Chemical Engineering degree, he/she will be admitted as a provisional student with the provision to complete pre-requisite courses prior to being permitted to enroll in the advanced core chemical engineering courses. A course plan will be presented to such a candidate at the time of admission, along with an estimated time at which the student will be eligible to declare candidacy and take thesis credits.

To take core and elective courses, a student only requires instructor's permission. For elective courses offered by other STEM departments, the student will follow the course prerequisites prescribed by the respective departments and instructors.

*Note: Students are expected to register for Graduate Seminar each semester during their tenure in our program

Program: [Chemical Engineering](#)

Type: MS

Required Core Course Credits

Item #	Title	Credits
CHEG-501	Advanced Transport	3
CHEG-502	Advanced Thermodynamics	3
	CHEG-504 or PHYS-216	3
CHEG-505	Advanced Chemical Eng. Reactions	3
CHEG-601	Graduate Research	1
CHEG-602	Graduate Research	2
CHEG-801	Graduate Seminar I	1
	Sub-Total Credits	16

Electives

Elective Course (Options: Courses under subject codes CHEG or courses in other disciplines in consultation with advisor)

Sub-Total Credits **9**

Theses

* Note: A maximum of 3 thesis credits may be taken per semester. In addition, a maximum of 6 thesis credits may be counted toward the required credits for program completion. Six hours must be taken through the program to meet degree requirements.

Item #	Title	Credits
CHEG-701	MS Thesis I	1-3
CHEG-702	MS Thesis II	1-3
	Sub-Total Credits	6
	Total credits:	31