

2015 On-campus M.S. degree curriculum

Department of Occupational Safety and Health

Educational goals:

1. Strengthen students' ability to think critically and communicate effectively,
2. Participate in occupational safety and health research,
3. Foster the ability to apply principles to real-world problems.

Department requirements:

1. The following curriculum applies to students who were admitted to the DOSH on-campus M.S. degree program in Sept. 2015;
2. A minimum of 36 credits is required for completion of degree program, including 6 obligatory credits, 6 thesis credits and 14 elective credits. The elective courses must include 12 credits from within- major and 5 credits from cross-major courses.

Obligatory course (13 credits):

Course name	Credit	Semester
Epidemiology (A)	3	1st
Seminar (I)	1	1st
Seminar (I)	1	2nd
Seminar (II)	1	3rd
Seminar (II)	1	4th
M.S. Thesis	6	4th
Total credits	13	

Elective courses (68 credits):

Course name	Credit	Semester
Environmental toxicology	2	1st
Fundamental of safety sciences	3	1st
Environmental chemistry	2	1st
Physical & mental workload assessment	2	1st
Indoor environmental quality	2	1st
Biostatistics (I)	2	1st
Biohazards	2	1st
Occupational epidemiology	3	1st
Occupational health	3	1st
Safety engineering	3	1st
Aerosol technology	2	1st
Transport of contaminants	2	2nd
Environmental monitoring at workplace	3	2nd
Control of noise & vibration	2	2nd
Research design	2	2nd
Biostatistics (II)	2	2nd
Good laboratory practice	2	2nd
Engineering control of workplace environment	3	2nd
Quantitative risk assessment	3	2nd
Applied ergonomics	3	2nd
Exposure assessment & biological monitoring	2	2nd
Scientific writing	2	2nd
Fire & explosion prevention	2	2nd

Elective courses (68 credits):

Course name	Credit	Semester
Chemical process safety	2	3rd
Environmental management	2	3rd
Reading of professional literatures	2	3rd
Health & environmental risk assessment	2	3rd
Environmental & occupational medicine	2	4th
Process safety in semiconductor manufactory	2	4th
Special topics on occupational safety & health management	2	4th
Total credits	68	