

# MINOR IN SUSTAINABILITY

As the world faces tremendous challenges and threats to its own sustainability – including climate change, environmental pollution, depletion of natural resources, loss of biodiversity, poverty, hunger, and gender equality – the importance of sustainable economic and social development is increasingly prioritized by organizations, governments, and citizens globally. The Minor in Sustainability provides students with a broad understanding of the principles of sustainability and the tools and techniques used for assessment and mitigation of issues in economic, social, and environmental sustainability.

A total of 15 credits are required to earn the Minor in Sustainability. Three required courses (9 hours) will introduce students to the social, political, and technical dimensions of sustainability. Two elective courses (6 hours) will allow students to focus in sustainability application areas of their choice while taking courses that are consistent with their level of preparation in their major degree program.

Code	Title	Credit Hours
ENVE 201	Earth Environ Sci (Earth and Environmental Science; submitted as a new course proposal 11/18/20)	3
PS 329 or PS 338	Environmental Politics and Policy Energy Policy	3
FDSN 314 or SAM 504	Sustainable Food Systems Industrial Ecology and the Circular Economy	3
Select a minimum of two courses from the following:		6
ARCH 421	Basics of Building Simulation in the Built Environment I	3
ARCH 422	Basics of Building Simulation in the Built Environment II	3
ARCH 460	Integrated Building Delivery Practice/ BIM	3
ARCH 462	Planning Law and Land Policy	3
CAE 331	Building Science <sup>1</sup>	3
CAE 465	Energy Conservation in Buildings <sup>1</sup>	3
CAE 556	Net Zero Energy Building Design I	3
CAE 557	Net Zero Energy Building Design II	3
CHE 543	Energy, Environment, and Economics <sup>1</sup>	3
CHEM 410	Science of Climate Change	3
CHEM 472	Environmental Chemistry	3
ECE 412	Hybrid Electric Vehicle Drives <sup>1</sup>	4
ECE 418	Power System Analysis <sup>1</sup>	3
ECE 548	Energy Harvesting <sup>1</sup>	3
ECE 580	Elements of Sustainable Energy <sup>1</sup>	3
SAM 501	Environmental Policy	3
SAM 502	Environmental Law	3
SAM 503	ESG Analytics and Management	3
SAM 504	Industrial Ecology and the Circular Economy	3
SAM 541	Sustainable Energy Systems	3

ENVE 401	Introduction to Water Resources Engineering <sup>1</sup>	3
ENVE 402	Introduction to Environmental Engineering and Sustainable Design <sup>1</sup>	3
ENVE 403	Occupational and Environmental Health and Safety	3
ENVE 404	Water and Wastewater Engineering <sup>1</sup>	3
ENVE 422	Global Environmental Change and Sustainability Analysis	3
ENVE 444	Carbon Capture, Utilization, and Storage	3
ENVE 463	Introduction to Air Pollution Control <sup>1</sup>	3
FDSN 410	Food Plant Operations	3
INTM 416	Integrated Facilities Management	3
INTM 423	Sustainable Facilities Operations	3
INTM 459	Issues in Industrial Sustainability	3
INTM 461	Energy Options for Industry	3
INTM 462	Special Topics in Sustainability	3
MMAE 522	Nuclear, Fossil-Fuel, and Sustainable Energy Systems <sup>1</sup>	3
MMAE 524	Fundamentals of Combustion <sup>1</sup>	3
<b>Total Credit Hours</b>		<b>15</b>

<sup>1</sup> Denotes a course with prerequisites in mathematics, science, and/or engineering. Check the course catalog for specific prerequisites.