

VIRTUAL LIGHTING DESIGN



4 CREDITS
ADVANCED TECH ELECTIVE

ARCH 410/510 | CRN: 21152/21246 | SIOBHAN ROCKCASTLE

This course will introduce students to the subject of next-generation lighting design through the use of performance simulation, real-time rendering and immersive virtual reality (VR). As our tools and methods move beyond the digital and into the virtual realm, our design process, client engagement, and human-centered research models are changing. With this transformation in software and hardware capabilities, we are now able to immerse ourselves, our clients, and our subjects within rendered scenes and visualize design changes in real-time. As these workflows find their way into professional offices small and large, this course will prepare students with state-of-the-art skills in rendering and analysis to generate and test lighting design ideas.

This course is funded by a grant from the Nuckolls Fund and will include guest support from academic, research, and industry partners including ZGF, Luma Lighting, and PNNL. Students will learn about virtual lighting design through software workshops and a term-long design project supported by ZGF and Luma Lighting. In addition to simulation and rendering skills, students will conduct mini-experiments in human-factor responses to the visual environment. Work will be conducted in teams and design reviews will be conducted in Virtual Reality.

Students are expected to have a working knowledge of 3D modelling in either Revit, Rhino, or Sketchup and have completed ECS II. For more information, please contact srockcas@uoregon.edu