IOWA STATE UNIVERSITY
Department of Chemical and Biological Engineering

Class of

2020

Graduation & Recognition Program
November 28, 2020
Connor Smith receives Lawrence E. Burkhart Memorial Award

The honor is bestowed upon one graduating senior each semester, named Outstanding Senior Student in Chemical Engineering, with emphasis on scholastic performance. The recipient is selected by department faculty. Burkhart, the award’s namesake, was a member of the department faculty from 1960-1988.

Smith is receiving his Bachelor of Science degree in chemical engineering and is graduating Summa Cum Laude.

While at Iowa State, he was a member of the prestigious Tau Beta Pi engineering honor society and served as corporate liaison, where he contacted keynote speakers and made arrangements for them to make presentations at honor society meetings, and assisted with event planning, networking workshops, volunteering projects, and social events.

Smith also took advantage of experiences to advance important chemical engineering skills. He participated in undergraduate research in covalent organic framework catalysis under the guidance of Dr. Levi Stanley, an associate professor of chemistry. He was part of the Griswold Undergraduate Research Interns Program in the Department of Chemical and Biological Engineering, which allows undergraduate students the opportunity to gain important hands-on laboratory experience working alongside department faculty members and graduate students. Smith studied with assistant professor and Karen and Dennis Vaughn Faculty Fellow Thomas Mansell to perform work in synthetic biology for human microbiome engineering. Smith would like to give a special thanks to Samuel Rothstein, a fall 2020 Ph.D. graduate from the Mansell Lab, for being a phenomenal mentor as well as a great friend.

In his senior year, Smith worked on a project for Mars Wrigley Confectionery, where he served as a part-time research and development engineering intern. His duties consisted of constructing and commissioning a pilot plant scale extraction process; designing experiments focused on reducing water usage for distillation; optimizing processing and raw material conditions for increased oil extraction; and creating a new standard for farmers regarding mint crop conditions during harvest.

Apart from engineering, Smith, who hails from Des Moines, also worked as a counselor with Iowa’s Ingawanis Camp with the Boy Scouts of America and a science tutor with the Bloomington, Minnesota Middle Schools. He enjoys hiking, camping, rock climbing, and long distance running. He would also like to give a special thanks to his ever-supportive fiancée Lauren, and their rapscallion dog, Max.

Following graduation he plans to seek a position as a full time research and development engineer, hopefully in the biotechnology or biomedical industry. Later plans include seeking a master’s degree or Ph.D. when he feels the time is right.

Outstanding Senior in Chemical and Biological Engineering

Every semester one senior from each College of Engineering department is selected as an Outstanding Senior. For the fall 2020 semester, Austin Angel was selected as the Outstanding Senior representing Chemical and Biological Engineering.

Austin will receive his B.S. in chemical engineering and will graduate with honors.

He has been named to the university dean’s list for six semesters, and was inducted into the Tau Beta Pi engineering honor society with the class of 2017-18 scholars.

Austin has held several leadership positions during his time at ISU, most notably serving as the executive director of ISU Dance Marathon. In that role he led a committee of 25 students, and created new recruitment techniques to reach students during the COVID-19 pandemic. He has also served as a first year honors program leader, a hall president, and volunteered with Youth Sports Outreach to play sports with local students enrolled in after-school programs.

Austin is currently completing a chemical engineering honors research project with Dr. Brent Shanks in which he is investigating energy generation and usage on the Iowa State University campus. Through this project he is applying his knowledge in chemical engineering to analyze ISU energy production systems, and is working with the Office of Sustainability to understand the primary uses of energy on campus. The ultimate goal of his project is to share his analysis to improve sustainable energy production on campus.

He also completed a co-op and an internship with Cargill. Through these work experiences he was able to improve safety, identify economic savings, and identify key process variables for energy use models, which will be employed to investigate potential energy and economic savings.

Austin studied abroad in Turin, Italy in 2017. This experience complemented his other research and work experience by allowing him to learn about sustainable practices used in Italian industry through tours of biofuel, battery, and food facilities along with his coursework.
Bachelor’s degrees conferred in Chemical Engineering

Abdullah Mubarak Alsinafi
Magna Cum Laude

Austin John Angel
Magna Cum Laude

Bradley Joseph Boyd
Magna Cum Laude

Blaine David Bristow
Magna Cum Laude

Sarah C. Busby

James L. Chen

Dexter James Clark

Ellery Patricia Clouse

Olivia Kathryn Cox

Mitchell D. Cunningham

Noah Thomas DeRoos
Cum Laude

Jonathan Lee Eiden

Bryce Fredric Frey

Samuel David Fritsch

Patrick David Garcia

Jackson Earl Gereau
Cum Laude

Wyatt Thomas Glienke

Isobel Zoe Gray

Katherine Grace Gruman
Magna Cum Laude

Austin Cole Jackson

Sarah Elizabeth Jackson

Nia Imani Johnson

Abigail Helen Koep

Yi Lu

Michael Thomas Malinowski

Ethan Arthur Mansfield

Germaine Gautier Mboui Ndoutoume

Kaitlyn R. McGinley-Colman

Kelvin John Miskowiec
Magna Cum Laude

Austin S. Reedy

Sarah K. Reedy

Luke Spencer Rustin
Cum Laude

Matthew David Schaschwary
Magna Cum Laude

Kevin James Shoucair

Connor Patrick Smith
Summa Cum Laude

Christian James Sorensen

Rae A. Stephenson
Cum Laude

Payton Levi Van Beek

LuVern James Wooge III

Jordan Jeffrey Jie-Fei Wright
Magna Cum Laude