

Applied Supply Chain, Engineering and Technology (ASET), Concentration

Chairperson: Mark Barratt, Ph. D.

ASCEnT (Applied Supply Chain, Engineering and Technology) is an interdisciplinary undergraduate concentration that responds to rapid changes in global commerce in how products are designed, manufactured, and delivered. Drawing students from business, engineering and computer science, the program prepares practice-ready graduates to improve end-to-end supply performance with ethical, evidence-based judgment while bridging traditional silos among operations, engineering and technology. Through a sequenced set of experiences - including an AI agility training, domestic and international supply network discovery trips, coursework in systems thinking and uncertainty management, and a technology integration course focused on Industry 4.0 and AI - students learn to map and analyze supply networks, manage complexity and risk, and design responsible technology solutions grounded in customer needs, technical feasibility, and financial return. The program culminates in a disruption-rich Chaos Project and a Reflection & Integration Studio in which students synthesize their learning and curate an employer-facing portfolio. Designed to complement a student's primary major, ASCEnT equips graduates to translate between technical and managerial stakeholders to accelerate their early-career readiness.

For information, contact: Dr. Marko Bastl or Dr. Phil Voglewede.

Students who complete all of the required elements of the ASCEnT earn a concentration in Applied Supply Chain, Engineering and Technology (11 cr. hrs.)

Students apply to the ASCEnT concentration in the fall term of the sophomore year for the start of the spring term of the same academic year, with acceptance based upon:

- Grades earned to date (GPA > 3.000)
- Resume
- References
- Essay
- Interview
- College of Business Administration Students only: completion or enrollment in OSCM 3001 Operations and Supply Chain Management and declaration of OSCM major

a. All students in the ASCEnT concentration must earn a grade of B- or better or S in all ASET courses.

Code	Title	Hours
MILESTONE - AI Agility - Developing Human Centric Approach to AI ¹		0
ASET 3951	Supply Network Discovery Trip - Domestic ²	0
ASET 3210	Supply Network Systems Thinking	3
ASET 3300	Uncertainty Management	2
ASET 4210	Technology Integration and Digital Transformation	3
ASETI 4951	Supply Chain Discovery Trip - International ²	0
ASET 4998	Chaos Project	2
ASET 4996	Reflection and Integration Studio	1
Total Credit Hours:		11

¹ The milestone is a non-credit training activity that starts in the Fall term: J Session for every cohort and needs to be completed before the end of the spring term.

² ASET 3951 and ASETI 4951 are non-credit courses but pedagogically connected with ASET 3210 and ASET 4210. ASET 3951 takes place in the Fall term: J Session and ASETI 4951 takes place during spring break. Students are required to complete ASET 3951 to enroll in ASET 3210 and ASETI 4951 to successfully complete ASET 4210.

b. Maintain a minimum cumulative GPA of 3.000 during the entire program.

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