



# Winter 2024 Graduate Courses

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## ISD Courses Available for the Winter Semester

The following ISD courses are being offered for Winter **2024**.

While ISD students have the flexibility to elect each term to take all of their courses that term either online or on-campus, it is important to note that they cannot take a mix of both during the same term.

ISD course online sections are designated as 88X or 98X and only ISD students with an online degree program code for a term can enroll in these sections. You will need to contact your ISD graduate coordinator if you wish to change your mode of delivery for a

term so that your program code can be changed. This allows the appropriate online tuition to be charged.

ISD students classified as online for a term are not allowed to register for any on-campus sections, which are usually designated 001 or 0XX, even if they are labeled as being offered “remote.” Remote sections are special courses for on-campus students only and require on-campus tuition to be paid. They are not applicable for ISD online students.

Click on the course description links below to learn more about each individual course offering.

## Winter Course Schedule

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### AUTO 542 (MECHENG 542) Vehicle Dynamics and Automation

- Online Course/Section(s): AUTO 542-881
  - On-Campus Course/Section(s): AUTO 542-001
  - Instructor: Gabor Orosz
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### AUTO 566 (MECHENG 566) Modeling Analysis and Control of Hybrid Electric Vehicles

- Online Course/Section(s): AUTO 566-881
  - On-Campus Course/Section(s): AUTO AUTO 566-001
  - Instructor: Jinming Liu
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### DESCI 502 Design Process Models

- Online Course/Section(s): **Not available**
- On-Campus Course/Section(s): DESC I 502-001
- Instructor: Diann Brei

## DESCI 791 Design Science Seminar

- Online Course/Section(s): **Not available**
  - On-Campus Course/Section(s): DESCI 791-001
  - Instructor: Charlie Michaels
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## ISD 520 Introduction to Systems Engineering

- Online Course/Section(s): ISD 520-881
  - On-Campus Course/Section(s): ISD 520-001
  - Instructor: Bob Bordley
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## ISD 522 Systems Engineering Architecture and Design

- Online Course/Section(s): ISD 522-881
  - On-Campus Course/Section(s): ISD 522-001
  - Instructor: Art Hyde
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## ISD 523 (IOE 561) Risk Analysis I

- Online Course/Section(s): ISD 523-881
  - On-Campus Course/Section(s): ISD 523-001
  - Instructor: Seth Guikema
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## ISD 527 (MFG 527) Design Quality: Design Six Sigma

- Online Course/Section(s): ISD 527-881, MFG 527-881
  - On-Campus Course/Section(s): ISD 527-001, MFG 527-001
  - Instructor: Pat Hammett
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## **ISD 528 (MECHENG 452, MFG 452) Advanced Design for Manufacturability**

- Online Course/Section(s): ISD 528-881
  - On-Campus Course/Section(s): ISD 528-001
  - Instructor: Kazuhiro Saitou
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## **ISD 546 (MECHENG 545, CEE 577) Dynamics and Control of Connected Vehicles**

- Online Course/Section(s): ISD 546-881
  - On-Campus Course/Section(s): ISD 546-001
  - Instructor: Gabor Orosz
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## **ISD 555 (MFG 555, MECHENG 555) Design Optimization**

- Online Course/Section(s): ISD 555-881, MFG 555-881
  - On-Campus Course/Section(s): ISD 555-001, MFG 555-001
  - Instructor: Jesse Austin-Breneman
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## **ISD 565 (MECHENG 565) Battery Systems and Control**

- Online Course/Section(s): ISD 565-881
- On-Campus Course/Section(s): ISD 565-001

- Instructor: Jason Siegel
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## **ISD 599 (EECS 419) Electric Machinery and Drives**

- Online Course/Section(s): ISD 599-889
  - On-Campus Course/Section(s): EECS 419-001
  - Instructor: Heath Hofmann
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## **ISD 599 (MECHENG 569) Control of Advanced Powertrain Systems**

- Online Course/Section(s): ISD 599-986
  - On-Campus Course/Section(s): ISD 599-086
  - Instructor: Anna Stefanopoulou
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## **ISD 599 (MFG 599, MECHENG 599) Foundations in Smart Additive Manufacturing**

- Online Course/Section(s): ISD 599-988, MFG 599-886
  - On-Campus Course/Section(s): ISD 599-088, MFG 599-006
  - Instructor: Chinedum Okwudire
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## **ISD 599 (MFG 599, MECHENG 599) Smart Manufacturing Systems**

- Online Course/Section(s): ISD 599-987, MFG 599-885
  - On-Campus Course/Section(s): ISD 599-087, MFG 599-005
  - Instructor: Judy Jin
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## **MFG 514 (MATSCIE 514, MACROMOL 514) Composite Materials**

- Online Course/Section(s): MFG 514-881
  - On-Campus Course/Section(s): MFG 514-001
  - Instructor: Kathleen Sevener
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## **AUTO 503 Automotive Engineering Project**

- Online Course/Section(s): AUTO 503-881
  - On-Campus Course/Section(s): AUTO 503-135
  - Instructor: Nicole Friedberg
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## **DESCI 503 DESCI Practicum**

- Online Course/Section(s): DESCI 503-881
  - On-Campus Course/Section(s): DESCI 503-135
  - Instructor: Nicole Friedberg
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## **ESENG 503 Energy Systems Engineering Project**

- Online Course/Section(s): ESENG 503-881
  - On-Campus Course/Section(s): ESENG 503-135
  - Instructor: Nicole Friedberg
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## **ISD 503 ISD Practicum**

- Online Course/Section(s): ISD 503-881
- On-Campus Course/Section(s): ISD 503-135
- Instructor: Nicole Friedberg

## MFG 503 Manufacturing Project

- Online Course/Section(s): MFG 503-881
  - On-Campus Course/Section(s): MFG 503-135
  - Instructor: Nicole Friedberg
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## Important Dates and Deadlines

### January 9, 2024

Last day to process initial registration without incurring a **late registration fee**.

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### January 10, 2024

Classes begin

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### January 30, 2024

Last day to withdraw from full term with assessment **registration and disenrollment fee** only.

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### February 20, 2024

Last day to withdraw with 50% tuition reduction

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### April 23, 2024

Last day of classes

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## Get Help with Registration

If you have questions about the registration process, please [contact our Graduate Student Coordinators at isdgradcoords@umich.edu](mailto:isdgradcoords@umich.edu)

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## How to Register for Courses

Information on how to register can be found at [ISD Course Registration](#). Please refer to the University's [Office of the Registrar calendar](#) for registration time periods for continuing and newly admitted students.

**For Sponsored Students**, please submit your voucher directly to Kellie Pennock, [kpennock@umich.edu](mailto:kpennock@umich.edu).



### Contact Us

✉ [isd-questions@umich.edu](mailto:isd-questions@umich.edu)

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☎ 1 (734) 647-7179

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📍 1075 Beal Avenue, Ann Arbor, MI 48109-2112



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