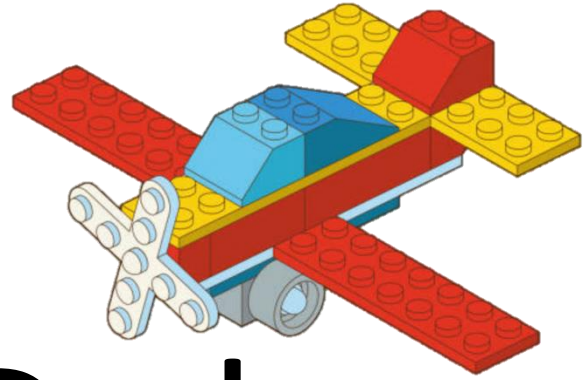
SIEMENS NX



MIT

How to CAD almost anything!

MIT IAP ‘25

Instructor: Andy Eskenazi

Session 1

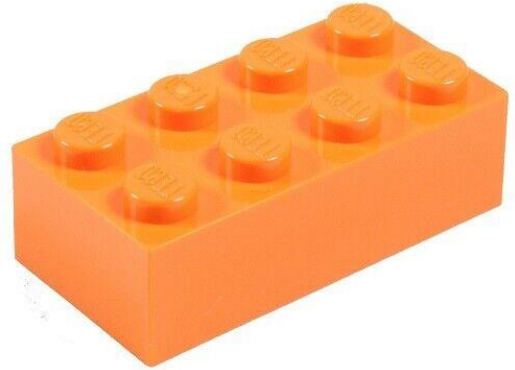
MIT AEROASTRO

MIT

Agenda



- Quick intros!
  - Why Siemens NX?
- Workshop logistics and important info
  - Overview of sessions and projects
- Session 1:
  - Demo of the session's Siemens NX command *sketches, plane selection, boss extrude/cut, fillet/chamfer, colors, material properties…*
  - Demo of projects: six-side dice, Nokia 8210
- Questions?
- Preview of Session 2



Quick Intros!

Me (Andy)

United A320 Pilots!

1) Name, major, year
   - Eg: Andy, AeroAstro, PhD Y2
2) Hometown
   - Eg: Buenos Aires, Argentina
3) Spirit animal
   - Eg: Angus Aberdeen cow
4) Why CAD almost anything?
   - Eg: I think it's cool to look at a random object and imagine how to cad it

Why CAD?

Building something new

Being creative

Getting faster at CAD

CADding more complex objects

Designing the objects I see in the real world

Making stuff for my room

Learning to be more efficient

Testing out different CAD platforms

Becoming more familiar

Making cool assemblies

Learning best practices

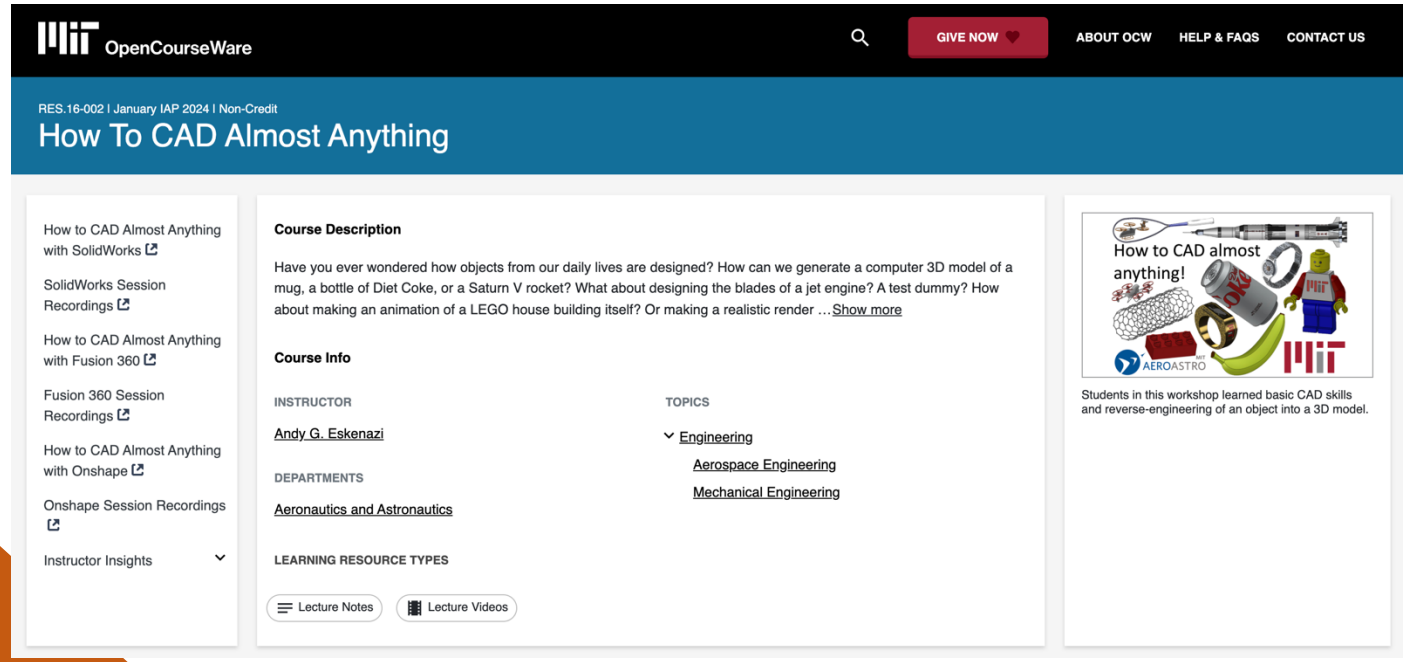
Generating figures for research

CADding stuff for D&D

CADding anything!

Why Siemens NX?

- Free (for students)
- Widely used by large engineering firms around the world, especially due to its part inventory system (Teamcenter)
- Comparable interface to Solidworks, but a lot more functionalities (to make the CAD process quicker)



- Add one more CAD software to the open-source portfolio in OCW!

Welcome!

How to CAD almost anything!

MIT IAP ‘25

Workshop logistics

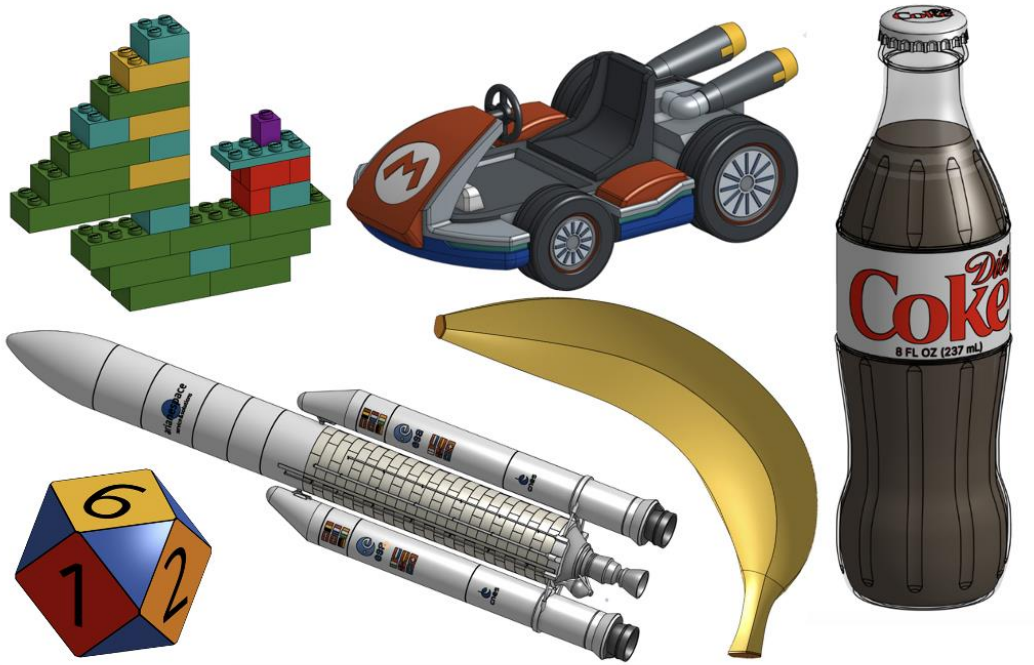
Week 1		Week 2		Week 3	
Session 1: January 7 (Tuesday)		**Session 3:** January 14		**Session 5:** January 21	
Sketches, basic feature commands, editing and defining sketches, coloring parts, changing material properties	• 6-sided dice • Nokia 8210	Revolve, mirror, circular patterns, angled planes	• Fidget spinner • Chinese pagoda	Assemblies, exploded view, animations, engineering drawings	• LEGO 2x4 brick • LEGO 2X8 plate • LEGO airplane assembly • Engineering drawings
Session 2: January 9 (Thursday)		**Session 4:** January 16		**Session 6:** January 23	
Spline tool, sketch picture	• MIT Angry Beaver banner • Airline keychain	Loft, sweep, review of previously learned commands	• Paddle tennis racket • Banana!	Sketch/feature names, equations, design table, configurations	• Wooden toy train with tracks

Important info

- Meeting times:
  - Tuesday: 10:00am – 12:00pm
  - Thursday: 10:00am – 12:00pm
- GIS & Data Lab (Rotch Library)
  - Open M – F: 10:00am – 6:00pm
  - 16 computers (which have Siemens NX on them).
- Online resources:
  - GitHub https://github.com/andyeske/How-to-CAD-Siemens-NX.

How to CAD almost anything!
IAP 2025 – AeroAstro Workshop

A compressed yet rewarding introduction to the parametric design software Siemens NX, for beginners (no experience at all) and pro-users alike. Come learn how to CAD



(computer-aided design) essentially almost anything!

Yes, this could be YOU at the end of the workshop! You'll be equipped with the tools to design cool looking things such as a LEGO boat, a Mario Kart, a bottle of Coke, a banana, an Arianne V rocket, and even a 12-sided dice!

Workshop Details

Subject Title:	How to CAD almost anything!
Prerequisites:	Willingness to have fun and think outside the box!
Enrollment:	20.

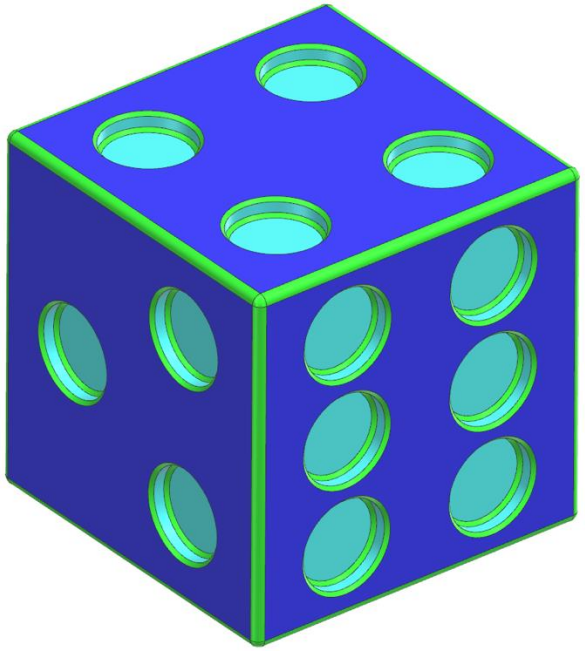
Check out the syllabus if you have more questions!

Session 1

6-sided dice

Nokia 8210 phone

6-sided dice



Nokia 8210 phone

Questions?

Preview into Session 2

MIT Angry Beaver banner

Airline logo keychains