



MakerBot Certification™ program

For students

Course description

As the leader in 3D printing for education, MakerBot already offers the easiest and most reliable 3D printers, hundreds of free lesson plans, industry-leading support, and the only ISTE-approved educator 3D printing program. Now, with the MakerBot Certification™ program for students, MakerBot is bridging the 3D printing skills gap for students to ignite design thinking and creative problem-solving in the classroom.

Goals and objectives

Give middle and high school students a proven edge with online certification for design thinking skills and hands-on 3D printing training.

Instructors

Reid Schlegel, Andrea Zermeno, and Felipe Castaneda.

Teacher/school/district outcomes:

- Bridge the 3D printing skills gap and kickstart design thinking
- Implement 3D printing successfully - no matter the size of your institution
- Facilitate a strong foundation in STEM learning utilizing 3D printing

Student learning outcomes:

- Confidence in setting up, printing, and troubleshooting MakerBot 3D Printers
- Apply design thinking skills to real-world applications
- Find design opportunities, defend design decisions, and present design solutions
- Apply advanced 3D printing skills for communicating design solutions with high-quality 3D printed models

The MakerBot platform



Ideal for every skill level

MakerBot Sketch is a solution that works for your classroom – whether you're printing for the first time, switching to a bigger printer, or scaling your 3D printer program.



CloudPrint software

Turn your students' digital models into physical 3D prints with MakerBot CloudPrint. This easy, cloud-based software requires no installation or student account creation.



Nurture design thinking

Self-paced, interactive training curriculum will prepare you and your students for 3D printing and career-building skills that go beyond the classroom.



Endlessly scalable

Begin with a platform that can serve the 3D printing needs of teachers in a single classroom or scale it across a whole school district.

MakerBot Certification program for students specifications

Required materials	MakerBot Sketch series 3D Printer Laptop MakerBot CloudPrint software
Resources	MakerBot Educators Guidebook Thingiverse Education MakerBot teacher certification 3D modeling software (TinkerCAD, Fusion 360, Inventor, Onshape, etc.)
Assessment	Quizzes and two exams, optional extra credit project graded by actual class instructor
Format	Online lecture, independent work, Group work encouraged
Prerequisites	N/A

Four-part online course series



Module 1 – 3D printer operator

- 3D printing technology & history
- MakerBot Sketch series set up
- MakerBot Print Software
- Basic troubleshooting



Module 2 – Design thinking

- Why Design Thinking
- How to ask questions
- Intro to creative problem-solving
- How to sketch solutions
- Basic rapid prototyping



Module 3 – Applied design thinking

- Identifying product design opportunities
- How to improve a design
- Testing designs and getting feedback
- Presenting product design ideas (entrepreneur skills)



Module 4 – Design for 3D printing

- Success with additive manufacturing
- Understanding 3D printing materials
- File exporting best practices
- Working with detailed design features

Contact us and get started today!

Sales: +1 347 269 2245

www.makerbot.com/certification