MakerBot

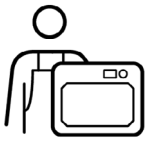
MAKERBOT CERTIFICATION™ PROGRAM FOR STUDENTS

COURSE SYLLABUS

INSTRUCTORS:	Reid Schlegel, Andrea Zermeno and Felipe Castaneda
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.
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.
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

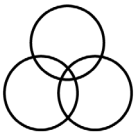
PREREQUISITES:	N/A
REQUIRED MATERIALS:	MakerBot Replicator+ 3D Printer Laptop MakerBot Print Software
RESOURCES:	MakerBot Educators Guidebook Thingiverse Education MakerBot Teacher Certification A 3D CAD Program (TinkerCAD, Fusion 360, Inventor, Onshape, etc)
ASSESSMENT:	Quizzes and two Exams, optional extra credit project graded by actual class instructor
FORMAT:	Online Lecture, Independent Work, Group Work encouraged

FOUR-PART ONLINE COURSE SERIES



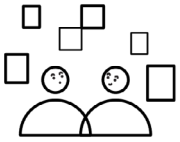
MODULE 1
3D PRINTER OPERATOR

- 3D printing techology & history
- MakerBot Replicator+ 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