

In Server Design, students learn the fundamentals of Java™ programming, while coding their own custom Minecraft® multiplayer server.

This is a project-based course where students take on the role of creator. In addition to technical skills, students develop the creative, critical thinking, and problem-solving skills necessary to build amazing projects from start to finish. Throughout the course, students work with industry-standard tools used by professionals. If they need any help along the way with their coursework or projects, students can reach out to experts for support by e-mail, chat, or phone.

By the end of this course, students will have built an original, professional-grade project and developed the knowledge, skills, and confidence to become creators on their own, in further study, or professionally.

Course Materials

This course has required materials.

Length: One semester

UNIT 1: WELCOME TO SERVER DESIGN

- Lesson 1: Start Your Servers
- Lesson 2: Server Maintenance
- Lesson 3: Wrap Up

UNIT 2: SERVER SETTINGS

- Lesson 1: A Simple Method
- Lesson 2: Method to the Madness
- Lesson 3: Wrap Up

UNIT 3: ENTER THE ARENA

- Lesson 1: Command Your Code
- Lesson 2: Back to Base!
- Lesson 3: Block Doctor
- Lesson 4: Wrap Up

UNIT 4: THE HORDES

- Lesson 1: Zombie Apocalypse
- Lesson 2: Trick Out Your Mobs
- Lesson 3: Mobs of Mobs
- Lesson 4: Wrap Up

UNIT 5: TREASURE CHESTS

- Lesson 1: Timing is Everything
- Lesson 2: Hip Hip H-Arrays
- Lesson 3: Random is Everything
- Lesson 4: Wrap Up

UNIT 6: SETTING UP SHOP

- Lesson 1: Store Stocking
- Lesson 2: Gimme Some Credit
- Lesson 3: Kit Stop

- Lesson 4: Wrap Up

UNIT 7: KEEPING SCORE

- Lesson 1: Team Building Exercise
- Lesson 2: What's the Point?
- Lesson 3: Wrap Up

UNIT 8: EPIC WIN

- Lesson 1: The Winning Condition
- Lesson 2: A Splash of Color
- Lesson 3: Wrap Up

UNIT 9: IN GOOD TIME

- Lesson 1: It's Game Time
- Lesson 2: The Final Countdown
- Lesson 3: Wait a Minute
- Lesson 4: Wrap Up

UNIT 10: SCAVENGER HUNT

- Lesson 1: Sacred Blocks
- Lesson 2: Block Recovery
- Lesson 3: Wrap Up

UNIT 11: RULE THE RULES

- Lesson 1: Lay Out the Rules
- Lesson 2: Easter Eggs
- Lesson 3: Custom Commands
- Lesson 4: Wrap Up

UNIT 12: FINAL TOUCHES

- Lesson 1: Standards of Excellence
- Lesson 2: Export and Upload

UNIT 13: ADVANCED TOPICS

- Lesson 1: Particles and Sounds
- Lesson 2: Boss Battle
- Lesson 3: Capture the Flag
- Lesson 4: Survival Games