JOHN WOOD COMMUNITY COLLEGE

STEM

Science, Technology, Engineering & Math

summer workshop

2015 Classes

Week 1 (June 1–June 5)

Construction Basics

Instructor: Dan Arnsman | Time: 9 am – 12 pm

If you like working with your hands, getting dirty and being creative, this class is for you! Students will begin to bring carpentry concepts together as they explore measurement techniques, blueprint reading, technical math, structural principles and finally safety. Students will build small, basic construction projects which will help to demonstration their understanding of construction basics.

Welding Basics

Instructor: Nick Wright | Time: 12:30 pm – 3:30 pm

Make sparks fly this summer! Learn to cut and weld metal using an arc welder and wire welder, just like the pros in this introductory welding course. Take your project home and show your friends and parents. No prior experience is necessary. Just come ready to create and make the sparks fly. Projects will vary. Leather shoes, long sleeves and long pants are required.

Week 2 (June 8–June 12)

Applied Carpentry

Instructor: Dan Arnsman | Time: 9 am – 12 pm

Prerequisite: Construction Basics or prior approval of instructor.

This course will build upon knowledge gained from Construction Basics. During this course the instructor will help guide students in tackling even more complex construction projects such as building stair risers.

Applied Welding

Instructor: Nick Wright | Time: 12:30 pm – 3:30 pm

Prerequisite: Welding Basics or prior approval of instructor.

This course will build upon knowledge gained from Welding Basics. Students will work with the instructor to creatively design and produce more complex welding projects with a greater focus on fabricating unique class projects.

Week 3 (June 15–June 19)

Robotic Basics

Instructor: Kristy McKenna | Time: 9 am – 12 pm

Use your imagination to design, build and create robots using Lego Mindstorms educational robotic kits! Program your unique robot to complete real life functions including picking up objects, driving safely, and much more!

Mechanical Design

Instructor: Randy Wolfmeyer | Time: 1 pm – 4 pm

Have you ever wondered what it takes to design and create the next great invention? You'll do it all in this course by using simple materials to design structures. Students will be allowed to explore various engineering principles and forces as well as the interactive, application side of mathematics and physics.

Week 4 (June 22–June 26)

Applied Robotics

Instructor: Kristy McKenna | Time: 9 am – 12 pm

Prerequisite: Robotic Basics or prior approval of instructor.

Take your robot to the next level! This course will build upon knowledge gained from Robotic Basics. Students will work with the instructor to creatively design and produce more complex projects with a greater focus on student, robotic design concepts.

Aeronautics

Instructor: Randy Wolfmeyer | Time: 1 pm – 4 pm

This course is designed for students who are fascinated by flight! Build working, small scale projects to explore the principles of flight and air pressure physics. Construct a wind tunnel to test out wing designs and shapes and water bottle rockets. Students will explore math and science to understand what they're building and make appropriate measurements and modifications during the concept design phase of their projects.

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Contact Jake at **217.641.4902** or **jhouston@jwcc.edu** for information or to register.