LEGO ENGINEERING
JUNE 8-25, 2015
Monday-Thursday

WEEK ONE
9:00 A.M.-NOON and 1:00 P.M.-4:00 P.M.
Same classes are offered during both sessions.

PRE-K: EARLY SIMPLE MACHINES
ELEMENTARY: BUILD TO EXPRESS
INTRO TO ROBOTICS
JR. HIGH: SIMPLE & MOTORIZED MECHANISMS
HIGH SCHOOL: MINDSTORMS ROBOT EDUCATOR

WEEK TWO
9:00 A.M.-NOON and 1:00 P.M.-4:00 P.M.
Same classes are offered during both sessions.

PRE-K: LEGO IMAGINATION STATION
ELEMENTARY: LEGO STORY STARTER
JR. HIGH: PNEUMATICS
HIGH SCHOOL: INTERMEDIATE ROBOTICS

WEEK THREE
9:00 A.M.-NOON and 1:00 P.M.-4:00 P.M.
Same classes are offered during both sessions.

PRE-K: ADVANCED SIMPLE MACHINES
ELEMENTARY: WeDo ROBOTICS CONSTRUCTION
JR. HIGH: MACHINES & MECHANISMS
RENEWABLE ENERGY
HIGH SCHOOL: ROBOT PROGRAMMING & DATA EXPERIMENTS
Coming to Shelton State is the opportunity for your child to have a great time while learning critical Science, Technology, Engineering, and Math (STEM) concepts that meet National Science Standards. These classes will help reinforce and add to what your child has learned in the classroom. The class will be facilitated by a LEGO trained instructor. Instructors create a fun, hands-on environment to help children build on their education. Concepts learned include the following:

- Basic engineering principles
- Design and redesign models
- Gears and gear ratios
- Simple machines
- Forces in motion
- Integrated problem solving
- Communication skills
- Teamwork and collaboration

EARLY SIMPLE MACHINES
Activities are designed to enable students to explore, investigate, and solve tasks related to mechanical principles.

IMAGINATION STATION
Students will work in groups to construct large scenes for a number of real-world and imaginative topics, all while fine-tuning their motor skills.

SIMPLE MACHINES
Students discover basic physical science concepts such as, gears, pulleys, levers, and wheels and axles.

BUILD TO EXPRESS
Students will be able to build LEGO models featuring working motors and sensors.

Each session runs for four days at a cost of $170.00 per camp session. A discounted price of $140.00 per session is offered if you enroll in more than one week.

NOTE: Students do not get to take home any of the LEGO projects they create. LEGO® is a trademark of the LEGO Group of companies, which does not sponsor, authorize, or endorse our programs.

STORY STARTER
Story Starter is a hands-on learning tool enhancing students’ reading, writing, speaking, and listening skills.

WE DO ROBOTICS
Students will build a tower crane, an intelligent house, a Ferris wheel, and a car using STEM concept learning skills.

SIMPLE & MOTORIZED MECHANISMS
Students will build and explore machines and mechanisms, calibrate and capture wind, and study gearing mechanisms.

PNEUMATICS
Students will explore mechanical advantage, balanced and unbalanced forces, and equilibrium.

MACHINES & RENEWABLE ENERGY
Students will explore renewable energy sources and investigate energy supply, transfer, accumulation, conversion, and consumption.

MINDSTORM ROBOT EDUCATOR
Students will build, program, and test solutions based on real-life robotics technology.

INTERMEDIATE ROBOTICS
Students will build larger and more complex models while at the same time providing extra or replacement elements.

ROBOT PROGRAMMING
Students will learn robot programming with the industry-leading graphical system design software used by scientists and engineers worldwide.

For more information, call 205.391.5874.

Deadline for registration is May 28, 2015.

REGISTRATION FORM

Name of Student: ________________________________________________

Grade Completed: __________

Birth Date: _______________ Sex: __________

Class(es) Desired: ________________________________________________

Name of Parent(s)/Guardian(s): __________________________________________

County: _______________________________________________________

Address: _______________________________________________________

City: __________________________________________________________

State: __________ Zip: __________

Day Telephone: __________________________

Evening Telephone: __________________________

Email: _______________________________________________________

Master Card, Visa, Discover, American Exp. # __________/_________/_________/__________

EXP: __________ Security Code #: __________

☐ I have enclosed full payment of $170.00 per child per course.

Make checks payable to Shelton State Community College.
Please include DL#, SS#, and date of birth on the check.

MAIL TO
Shelton State Community College
Instructional Outreach
Box 111
9500 Old Greensboro Road
Tuscaloosa, AL 35405