

Overall experience:

Girl Scout Campers will create and program robots that can do simple but smart things, and design their special robots that can help people and benefit the society. The camp will provide the girl scout camper with an understanding of basic electronic circuitry, engineering, computer science, and robotics. They will gain basic programming skills (through writing programs using blocks and python) that will be useful in their future endeavors. The camp will conclude with demos and presentations for parents, guardians, and friends.

Resources for students/parents:

Go to <http://homes.sice.indiana.edu/yyc/camp2019/> or scan the QR-code below



Other resources:

Scratch: <https://scratch.mit.edu>

Python: <https://www.python.org>

BlocksCAD: <https://www.blockscad3d.com>

Raspberry PI projects: <https://projects.raspberrypi.org/en/>

We will mainly use one of the two rooms in Luddy Hall (room 0121 or 0006) for the activities, expect those marked in red in the table.

Time	Monday (July 8)	Tuesday (July 9)	Wednesday (July 10)	Thursday (July 11)
8-9am		Breakfast (in Wright)	Breakfast (in Wright)	Have bags packed and ready for checkout before leaving for breakfast Breakfast (in Wright)
9am-12pm	10:30-11am Check In 11am-12pm Intro Session/Expectations	>Program Susie/Cracker using Scratch >Video (cool robots) >Robot design in Scratch	>Build robot and program it using Python >Introduction to AI (room 4111)	>Assemble/Finish robot >10-11am 3D printing & laser cutting (Protolab) >Finish robot design
12-1pm	Lunch (Pizza @ Luddy)	Lunch (in Foster Gresham)	Lunch (in Foster Gresham)	Lunch (in Wright)
1-2pm	> Introduction to Susie (Lego cat) &Cracker (Lego robot) > Introduction to (block-based) programming	>Introduction to Raspberry pi. >Introduction to Python. (room 4111)	To dorms to prep for swimming	1pm – Pack Bags 1:30pm – Wright formal lounge for final presentation
2-4pm	>What robots can do (video & discussions) >Program Susie & Cracker in Scratch >Design 3D objects in BlocksCAD (for 3D printing)	>Demo by the “ <u>Vehicle Autonomy and Intelligence Lab</u> ” (community room) > Work with motors > Build robot and program it using Python (room 4111)	Swimming at IU Pool	1:30-2:30 Demos for Parents 2:30-3:00 Recruiting Presentation for Parents 3:00 Back to dorm for check out
4-5pm	>Group photo >Wrap Up then head toward dinner	Wrap Up then head toward dinner	Clean up from swimming and head toward dinner	
5-6pm	Dinner (in Wright)	Dinner (in Foster Gresham)	Dinner (in Wright)	
6-9pm	Evening with Girl Scout Staff	Prep for/go to IMU Bowling 7-8pm (6 lanes currently), Activities w GS staff	Evening with Girl Scout Staff	