



# Welcome!

## PCC Robotics Shop Training Summer Camp Sylvania Campus

We are pleased to introduce you to the Engineering and Industrial Technology programs and facilities at Portland Community College. As an ambassador for your *FIRST* robotics team, we will offer relevant shop training for you to use and share with your team members. This camp will consist of five days of morning and afternoon training sessions during which you will build a project and learn skills that you can apply to next season's robotics challenge. We will end the week with a celebration of your accomplishments.

Welcome to PCC! Thank you for your enthusiasm and participation.

Sarah Tillery  
Dean, Engineering & Industrial Technology  
Portland Community College

Please complete and sign the following forms by **FRIDAY, MAY 31st** and return them via Adobe Sign or scan and email to: **debbie-kerr@ortop.org**

- Student and emergency contact information (*this page*)
- Consent Form
- Shop Safety Agreement
- Media Release

Student's Name (*Print*) \_\_\_\_\_

### PRIMARY EMERGENCY CONTACT

Name \_\_\_\_\_

Telephone number \_\_\_\_\_

Email \_\_\_\_\_

### SECONDARY EMERGENCY CONTACT

Name \_\_\_\_\_

Telephone number \_\_\_\_\_

Email \_\_\_\_\_



# PCC Robotics Shop Training

## Summer Camp Application

### PLEASE REVIEW THIS ENTIRE DOCUMENT PRIOR TO COMPLETING THIS APPLICATION FORM

This program will expose high school students (minimum age of 14 years old) involved in the international FIRST robotics competitions, to the Machine Manufacturing Technology (MMT) program and MakerLab at Portland Community College (PCC).

The camp has been reformatted from prior years to give students more relevant skills in a shorter time frame (5 days) and will split time between the PCC machine shop and the MakerLab. An agenda of the daily activities is attached for your reference. This program waives about \$150 in lab fees and supplies per student for the week! If you need to park on-campus, there is a fee. City bus passes are available upon request.

We are initially accepting up to two students from each team for the camp. After May 31st we will open registration to others that have applied as alternate attendees to fill the camp. The camp will be limited to 20 attendees for safety reasons. If you cannot attend all 5 days of the camp, please email Debbie Kerr @ debbie-kerr@ortop.

**WHICH CAMP ARE YOU APPLYING FOR:**  June 24-28, 2019 (all-gender camp) *\*This camp is designed for any female-identified or gender fluid students.*  
 July 8-12, 2019 (young women's camp\*)

#### PRINT LEGIBLY

Name \_\_\_\_\_

Contact telephone number \_\_\_\_\_ Team representing \_\_\_\_\_

How old will you be on June 24, 2019? \_\_\_\_\_ Contact e-mail address: \_\_\_\_\_

**I AM APPLYING AS A PRIMARY REPRESENTATIVE FOR MY TEAM** (two applicants per team). Complete this section. We will contact your coach to confirm his/her support.

Coach name \_\_\_\_\_

Coach contact phone number \_\_\_\_\_ Coach email \_\_\_\_\_

**I AM APPLYING AS AN ALTERNATE APPLICANT.** If you are not applying as a primary representative, your application will be taken and held for any available seats after May 30, 2018.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Comments \_\_\_\_\_

If under age 18, please have a parent or guardian sign this form approving your enrollment, confirming the time and date commitments to the class.

Printed name \_\_\_\_\_ Contact Phone number \_\_\_\_\_

Signature \_\_\_\_\_





# PCC Robotics Shop Training

## Summer Camp Schedule and Agenda

This is a general schedule and agenda for the PCC Robotics Shop Training summer camp. More details to come!

### DAILY SCHEDULE

9am – 10am           **OVERVIEW / WELCOME OR RECAP** (All students)

10am – 12:30pm   **MORNING SESSION**  
Machine Shop (Group A)  
MakerLab (Group B)

12:30pm – 1pm      **LUNCH BREAK**

1pm – 3:30pm      **AFTERNOON SESSION**  
Machine Shop (Group B)  
MakerLab (Group A)

### DAY 1

Introductions, tours of PCC Machine Shop, MakerLab and CC building.

Machine shop: Simple shop blueprints, basic measuring tools, rulers, protractor heads, center finder head, radius gauges, center punch and hammer, scribe, angle plates and clamping, precision measurement, calipers, height gauges, micrometers.

MakerLab: Vector vs. raster graphics, vector software introduction, machine operation and troubleshooting, material discussion, decal making and application.

### DAY 2

Machine shop: Tap drills and tapping, theory on feeds and speeds, drill press orientation and operation, vice setup, wigglers, changing chuck to Morse taper drills using drift, clamping large items.

MakerLab: Introduction to sheet metal equipment, safety, basic cuts, bends, punching, notching and pop rivets.

### DAY 3

Machine shop: Introduction and work time for custom project.

MakerLab: Introduction to laser cutting, safety, machine operation and troubleshooting, material discussion, laser software controls. Work time for custom project.

### DAY 4

Machine shop: Lathe theory and machine orientation, mill theory, machine overview, edge finder.

MakerLab: Introduction to 3D modeling, finding readymade parts, machine overview, operation and troubleshooting, material discussion, 3D printing practice, part removal and post-processing.

### DAY 5

Machine shop: Continuation of lathe and mill operation and open project time.

MakerLab: Open project time.

End of camp celebration.



# Consent Form

## Agreement Acknowledging a Parent's/Legal Guardian's Consent and Release of Liability for Minor (under 18)

By my signature below, I give permission for my son/daughter/ward to participate in the below named **ACTIVITY**. I understand and AGREE that by my son/daughter/ward participating in this Portland Community College (PCC) Activity, that he/she may be exposed to a variety of hazards and risks of injury, foreseen or unforeseen, which cannot be eliminated due to the nature of the Activity. These inherent risks include, but are not limited to: death, serious neck and spinal injuries which may result in complete or partial paralysis, brain damage, serious injury to virtually all bones, joints, ligaments, muscles, tendons, and other aspects of the muscular-skeletal system and serious injury or impairment to other aspects of the body, health and well-being. I also understand that the dangers and risks of my son/daughter/ward engaging in this Activity may result not only in serious injury, but in a serious impairment of his/her future abilities to earn a living, and to engage in business, social and recreational activities and generally to enjoy life.

PCC has not tried to contradict or minimize my understanding of these risks. I understand that risks of such Injuries and Damages are involved in adventures such as this Activity. I acknowledge that my son/daughter/ward must exercise extra care for his/her own person and for others around him/her in the face of such hazards. I further understand that in this Activity there may not be immediate rescue or medical facilities or expertise necessary to deal with the Injuries and Damages to which my son/daughter/ward may be exposed.

In consideration of my acceptance for my son/daughter/ward being a participant in this Activity, I confirm my Agreement and Understanding that:

- My son/daughter/ward is personally responsible for all risks associated with this Activity.
- If my son/daughter/ward decides to leave early and not to complete the Activity as planned, I assume all risks inherent in my son/daughter/ward's decision to leave and I waive all liability against PCC arising from that decision. Likewise, if the Activity is cancelled, and my son/daughter/ward decides to go forward without the Instructor, I assume all risks inherent in my son/daughter/ward's decision to go forward and I waive all liability against PCC arising from that decision.
- This Agreement is intended to be as broad and inclusive as is permitted by law. If any provision or any part of any provision of this Agreement is held to be invalid or legally unenforceable for any reason, the remainder of this Agreement shall not be affected thereby and shall remain valid and fully enforceable.
- To the fullest extent allowed by law, **I voluntarily agree to Waive and Discharge All Claims of Whatever Nature, and Release from Liability**, fully and finally, now and forever, for my son/daughter/ward, myself, estate, heirs, administrators, executors, assignees, successors, and for all family members, and to release, exonerate, discharge and **Hold Harmless** Portland Community College, its Board of Directors, the individual members thereof, and all officers, agents, employees, volunteers, and representatives from any and all liability, claims, causes of action or demands arising out of any injuries, property damage, or losses of any kind to my son/daughter/ward which may result from or in connection with the below named Activity.
- I have read this Agreement in its entirety and I freely and voluntarily assume all risks of such Injuries and Damages and notwithstanding such risks, I agree to have my son/daughter/ward participate in the below named Activity.

### **MEDICAL TREATMENT AUTHORIZATION**

In the event of illness and/or injury, I (*parent/legal guardian named below*) do hereby consent to whatever emergency care, medical or dental examination/diagnosis, and/or transportation to a hospital or clinic that is considered necessary in the best judgment of the instructor and/or an Emergency Specialist.

I further consent to treatment, x-rays, anesthetic, or surgical care that is considered time-essential by an attending physician, surgeon, or dentist, and performed under the supervision of a member of the medical staff of the hospital or clinic furnishing medical or dental services for my son/daughter/ward.

**PARENT/LEGAL GUARDIAN MUST SIGN THIS AGREEMENT ON BEHALF OF MINOR**

I, \_\_\_\_\_, hereby agree and consent to the  
*(Print Parent/Legal Guardian Name)*

foregoing Agreement on behalf of \_\_\_\_\_  
*(Print Minor's Name)*

Parent/Legal Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

Minor Student's Name *(Print)* \_\_\_\_\_

Minor Student's Signature \_\_\_\_\_ Date \_\_\_\_\_

Minor Student's Date of Birth \_\_\_\_\_ Age \_\_\_\_\_

**Name/Descriptions of ACTIVITY:** PCC Robotics Shop Training

**Instructor/Director Name:** Matt Graves, Amy Petit

**Activity Date(s):** June 24-28, 2019 & July 8-12, 2019

*This signed form must be on file with the College before the Activity commences*



When an individual's works or likeness is to be used in any PCC publication, a PCC Media Release is required. If a photo or recording is taken of a crowd or of a group of people where no one person is the focus, no release is needed.

While it is not required to obtain a release from staff for their likeness, one will be requested when it is convenient. If the individual is a minor, their parent or legal guardian must sign the Release.

## PCC MEDIA RELEASE

Date \_\_\_\_\_

I, \_\_\_\_\_  
*(Print student's name)*

hereby authorize Portland Community College to record my likeness and/or works; and at their discretion to use and authorize others to use my likeness and/or works for student recruiting, fund raising and publicity purposes, without compensation. For example, your photo could be featured on TriMet bus and train ads as part of a PCC advertising campaign.

I hereby acknowledge that I have read and understood the terms of this release.

Minor Student Signature \_\_\_\_\_

Telephone \_\_\_\_\_

Email \_\_\_\_\_

Signature of Parent or Guardian \_\_\_\_\_



# Shop Safety Agreement

In order to ensure a safe working environment for all students, please read and sign the following agreement that you will comply with these rules.

## MACHINE SHOP

- Safety glasses will be provided and must be worn at all times
- Long hair must be fully pulled back behind your shoulders
- Long sleeves must be rolled up in the lab
- No open-toe or open-heel footwear can be worn in the lab
- No short pants or “cut-offs” of any kind are allowed in the lab
- No jewelry (necklaces, earrings, rings, bracelets, watches or fitbits)
- Student’s personal property should not be left in the lab
- All tools obtained from the Tool Crib must be returned at the end of the session
- All injuries, no matter how small, must be reported to an instructor
- No food or drink in the lab
- Clean up work area at the end of the session

## MAKERLAB

- Safety glasses will be provided and must be worn when instructed
- Kevlar gloves must be worn when removing 3D prints from build plate
- Laser cutting must be actively supervised. Never walk away from the machine while it is cutting.
- No open-toe or open-heel footwear can be worn in the lab
- No short pants or “cut-offs” of any kind are allowed in the lab
- Long hair must be pulled back
- Student’s personal property should not be left in the lab
- Food and drink must be kept in designated areas only and not near computers or work spaces.
- All tools and supplies must be returned to the appropriate areas at the end of the session
- Clean up work area at the end of the session

Student’s Name (*Print*) \_\_\_\_\_

Student’s Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature of Parent or Guardian \_\_\_\_\_ Date \_\_\_\_\_

**RETURN THIS APPLICATION BY ADOBE SIGN or E-MAIL TO: [debbie-kerr@ortop.org](mailto:debbie-kerr@ortop.org)** Please include your name and team name in the header of the return e-mail.