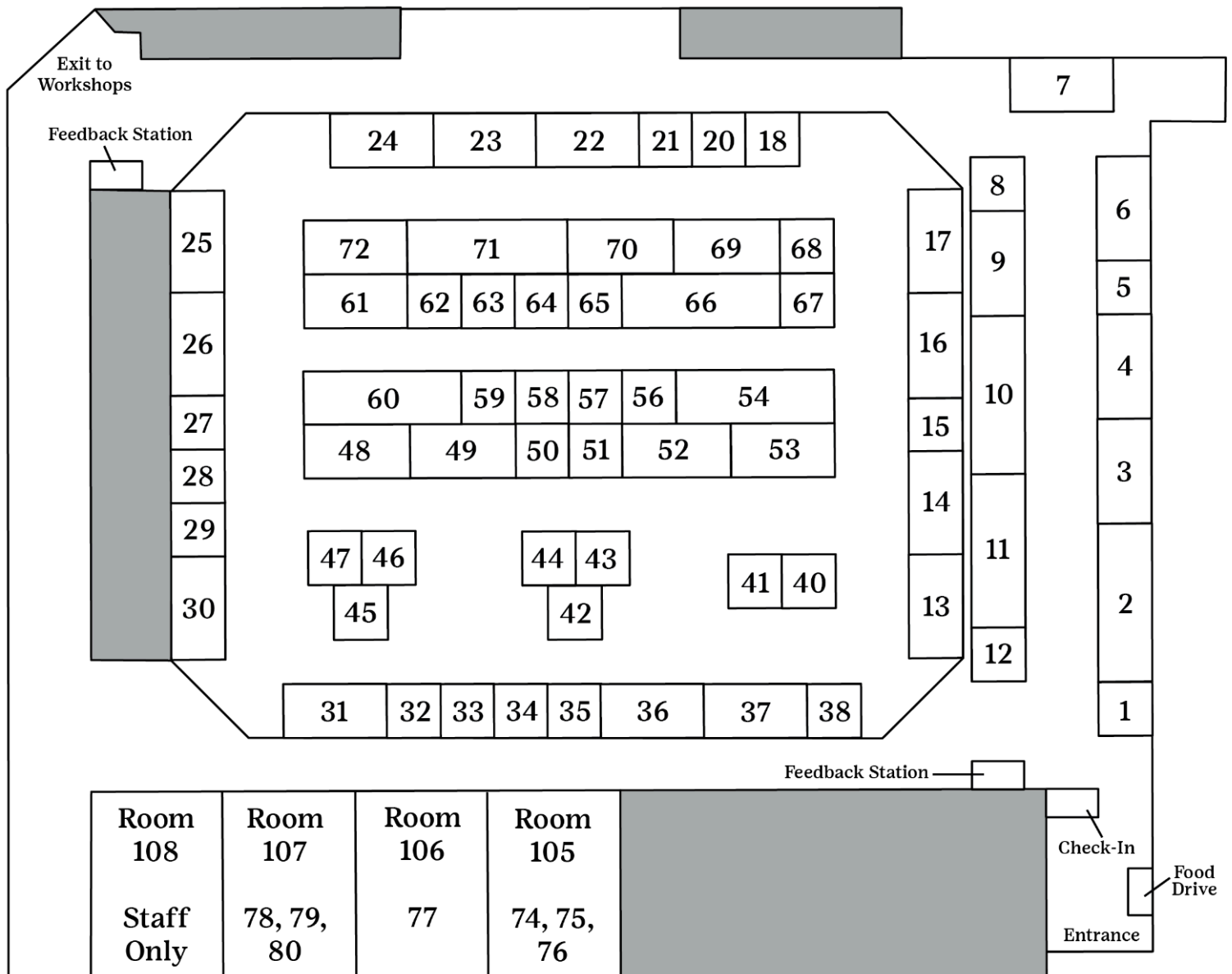


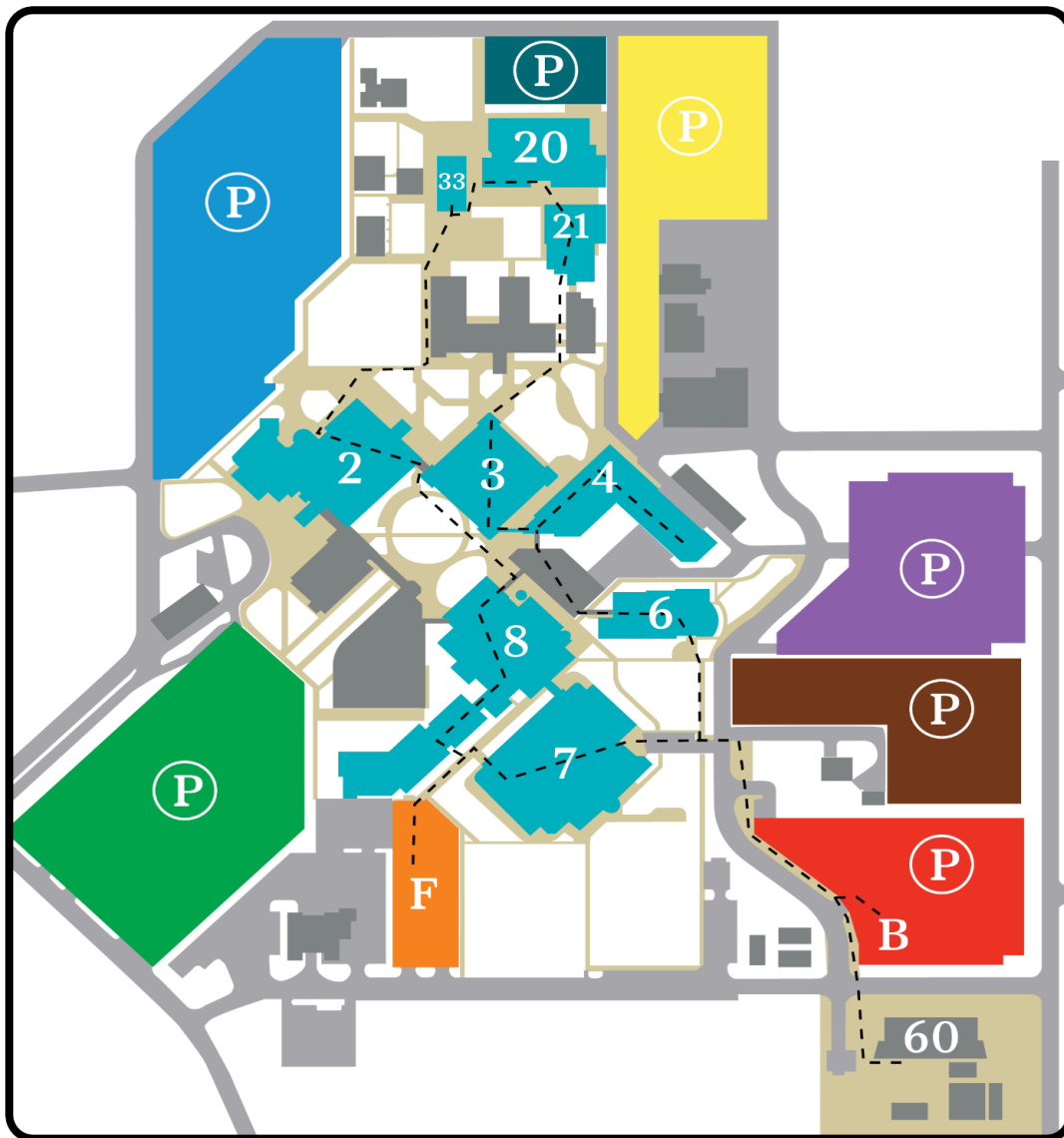


Welcome to Girl Scout STEM Day!

STEM Day Expo Booths



Campus Map



Building 2: Planetarium Workshop

Building 3: Math Workshop

Building 4: Electronics, Robotics, Automotive Workshops, and Valley Radio Club of Oregon

Building 6: Computer Information Systems Workshop

Building 7: Check-In and STEM Day Expo Booths

Building 8: Nursing, Dental Assisting, and Life Sciences/Geology/Physics Workshops

Building 20: Machining Workshop

Building 21: Welding Workshop

Building 33: Apprenticeship Workshop

Building 60: Horticulture and Business Leadership Workshops

F (Orange Lot): Food Carts, Additional Booths, Girl Scout Shop on the Go

B (Red Lot): Truck Driving (Big Rig) Workshop

Additional information about workshops, including descriptions and location details, can be found on the next page.

STEM Day Workshops

Workshops run every thirty minutes from 9 a.m. until 3:30 p.m., excluding the lunch break from noon to 1 p.m. Workshops are drop-in, but have limited capacity. Be sure to arrive on time! Approximate start times include 9 a.m., 9:30 a.m., 10 a.m., 10:30 a.m., 11 a.m., 11:30 a.m., 1 p.m., 1:30 p.m., 2 p.m., 2:30 p.m., 3 p.m., and 3:30 p.m.

Workshop 1: Math

Building 3, Room 277

Explore some hands-on math games.

Workshop 2: Computer Information Systems

Building 6

Learn about cybersecurity.

Workshop 3: Electronics

Building 4, Room 120

Play with lights.

Workshop 4: Robotics

Building 4, Room 224

Run a high-tech robot and learn about pneumatics. Make your first HAM contact with the Valley Radio Club of Oregon.

Workshop 5: Automotive

Building 4, Room 140

Get hands-on with cars in the auto shop.

Workshop 6: Machining

Building 20, Lobby

Check out some high-tech equipment and how it's used.

Workshop 7: Horticulture

Building 60, Outside

Plant a seed and explore an electric tractor.

Workshop 8: Business Leadership

Building 60, Main Lobby

Work in a team to complete a LEGO building challenge.

Workshop 9: Truck Driving

Red Parking Lot

Hop in and drive in the Big Rig truck simulator.

Workshop 10: Apprenticeship

Building 33, Trades Room

Discover the tools of the trade in HVAC systems, plumbing, and electrical.

Workshop 11: Welding

Building 21, Foyer

Discover what holds things together.

Workshop 12: Nursing

Building 8, Simulator Lab

Visit the simulation lab and perform pulse reading and other skills.

Workshop 13: Dental Assisting

Building 8, Dental Lab - Room 105

Visit the lab and try your hand at dental assisting.

Workshop 14: Life Science, Geology, and Physics

Building 8, Room 232

Explore the many aspects of science.

Workshop 15: Planetarium

Building 2

Experience the stars above!

STEM Day Expo Booths

- 1. Marion County Sheriff's Search and Rescue**
Explore search and rescue gear, ropes, and a pulley system. Plus, check out the search and rescue vehicle in the Orange parking lot!
- 2. Willamette University Biology Department**
Look at pond water and cheek cells through a microscope.
- 3. Girl Scout Troop 40110**
Explore STEM with Girl Scout Troop 40110.
- 4. Fusion Industries**
Explore hands-on experiments with sound waves and electro magnetics!
- 5. Chemeketa Criminal Justice Programs**
Explore careers in criminal justice. Plus, check out the police vehicle in the Orange parking lot!
- 6. Overcharged Robotics**
Meet Overcharge Robotics Team's robot Crane.
- 7. OregonRocketry**
Explore the physics of flight and make straw rockets.
- 8. Salem Health Community Health Education Center**
Discover the science of sugar.
- 9. Get Kids into Survey & PLSO**
Explore high-tech equipment and discover the surveying trade.
- 10. Oregon State University Dept of Fisheries, Wildlife, and Conservation Sciences**
Explore high-tech equipment in conservation and wildlife careers.
- 11. Oregon Department of Fish & Wildlife Fisheries**
Learn to fish and why fishing is part of conservation.
- 12. Girl Scout Shop**
Browse and purchase Girl Scout badges.
- 13. Girl Scout Product Program Department**
Taste our new ABC Girl Scout Cookies and practice selling.
- 14. Oregon State University College of Forestry**
Explore forestry and the many wood products it produces.
- 15. World Salmon Council**
Discover the salmon life cycle.
- 16. Mathnasium of Salem**
Play some fun math games.
- 17. GSOSW Astronomy Club**
Explore space and the moon.

18. High Voltage

Meet High Voltage Robotics Team's robot.

20. American Red Cross

Prepare for a disaster and learn about hands-only CPR.

21. The 2nd Drawer Down

Discover the science of sewing.

22. Hampton Lumber

Learn how pollinators are vital to our forests and discover engineering in forestry.

23. United Airlines

Take flight with United Airlines and meet women in aviation.

24. Washington Geological Survey

Rocks rock!

25. The LEGO Legends FIRST LEGO League

Discover LEGO robotics with the LEGO Legends.

26. Western Oregon University FEM in STEM

Enjoy some fun STEM experiments.

27. Air Force Academy and Scholarships

Check out a virtual reality (VR) flight simulation.

28. Eterna

Discover RNA structures with fun games.

29. American Red Cross

Learn about blood types and the blood donation process.

30. USGS Cascades Volcano Observatory

Learn all about volcanoes.

31. Adobe Express for Education

Explore your digital creativity with graphic design and video creation.

32. Oregon Department of Fish and Wildlife - Avian

Learn about banding birds and conservation.

33. Oregon Health & Science University - Portland Alcohol Research Center

Understand the brain and explore careers in neuroscience.

34. Oregon Health & Science University - Balance Disorders Laboratory

Uncover the science of balance and gait.

35. Portland General Electric

Discover the tools of the trade and learn about clean and renewable energy.

36. Girl Scout STEM Club

Join the Girl Scout STEM Club for hands-on STEM activities.

37. Tillamook County Creamery Association

Discover the STEM in dairy.

38. Oregon State University Marine and Geology Repository

Learn about Earth's geological history from rocks and sediment.

40. South Santiam Watershed Council

Discover macroinvertebrates from the waters around you.

41. Oregon Dairy Women

From moo to you.

42. Architecture Foundation of Oregon

Explore architecture and engineering while constructing a geodesic dome.

43. Oregon State University College of Engineering

Explore engineering with hands-on activities.

44. Starker Forests Inc.

Learn to identify trees and explore the products that come from them.

45. Society of Women Engineers

Explore STEM with the Society of Women Engineers.

46. Escapism Portland

Explore a mini escape room and decoding activity.

47. Willamette Resources & Educational Network (WREN)

Discover the ingredients for a healthy wetland habitat.

48. Oregon Coast Aquarium

Sift through the sand to discover microplastics and their impact on the environment.

49. Georgia-Pacific

Make your own paper.

50. Audrey Sauble, Nature Educator

Connect art to STEM with nature journaling and drawing.

51. Portland Fire & Rescue

Try on some fire gear and explore what being a firefighter is all about.

52. Oregon Health & Science University - Department of Molecular & Medical Genetics

Dissect a strawberry and check out its DNA.

53. Simply Science, LLC

Play some fun games.

54. Oregon Dept of Emergency Management & Oregon Dept of Geology and Mineral Industries

Explore the impact of earthquakes and tsunamis and how you can prepare for an emergency.

56. Oregon State University - Plant Pathologist Collins Bugingo

Discover how plant science impacts a safe and abundant food supply.

57. Washington State Parks and Recreation Commission

Meet female park rangers and discover the landscape around Mount St. Helens.

58. Dental Hygiene

Discover the science behind caring for your teeth.

59. Friends of Columbia Gorge

Learn about environmental conservation.

60. Oregon Department of Fish and Wildlife - Invasive Aquatic Species

Perform mock boat inspections as you learn about the impacts of aquatic invasive species.

61. Evergreen Aviation and Space Museum

Explore flight and space.

62. VintageTEK Museum

Check out some vintage tech equipment with hands-on experiments.

63. Chemeketa Biology Department

Explore the microscopic world of moss and lichens.

64. Oregon Optometric Physicians Association

See careers in optometry and explore the STEM in your eyes.

65. Service Unit 28

Participate in fun hands-on STEM activities with local Girl Scout volunteers.

66. Ballard Marine Construction

Build a bridge together with others.

67. Oregon State Public Health Laboratory

Experience what it's like to be in a lab and learn about STEM in public health.

68. Girls Empowerment Science Outreach

Explore STEM with the GESO club.

69. CV Robotics

Meet a local robotics club and their competitive robot.

70. Orchard Hills Animal Hospital

Discover careers in veterinary medicine and perform surgery on a teddy bear.

71. Oregon State University, College of Agricultural Sciences

Discover careers in agricultural science with hands-on activities.

72. Beaverton Civic Theatre

Learn about the latest show and the engineering in origami.

74. Chintimini Wildlife Center

Get hands-on with some local critters.

75. Garibaldi Cultural Heritage Initiative

Explore a local tide pool.

76. Hiss & Hers

Meet some snakes as you explore the science of reptiles.

77. Oregon Oldtime Fiddlers Association

Discover the physics of sound as you learn about traditional fiddle music.

78. Girls Build

Get hands-on with metalworking and leatherworking.

79. ReBuilding Center

Come to some shocking conclusions.

80. NAWIC

Discover tools of the construction trade.

Girl Scout Badges and Patches

During STEM Day, you have the opportunity to work toward earning different Girl Scout badges and patches!

Girl Scout badges are official Girl Scout insignia created by Girl Scouts of the USA, with specific criteria to earn them. Badges are worn on the front of a vest, sash, or tunic, and demonstrate that a Girl Scout has tried out a new skill such as how to make a healthy snack, build and test a toy race car, or take great digital photos. Each Girl Scout grade level has its own set of badges distinguished by their shape and complexity. Grade levels include:

- Girl Scout Daisies (K-1)
- Girl Scout Brownies (2-3)
- Girl Scout Juniors (4-5)
- Girl Scout Cadettes (6-8)
- Girl Scout Seniors (9-10)
- Girl Scout Ambassadors (11-12)

Patches are created by Girl Scout councils, partners, or other businesses, and may or may not have specific criteria—some have requirements, some are just for fun. Patches are worn on the back of the vest, sash, or tunic, and represent the variety of fun experiences you can have in Girl Scouts!

Girl Scouts may be able to work toward earning the following patches and badges by visiting the booths listed under each patch/badge:

- **STEM Career Exploration badge (All Levels)**
 - All Girl Scouts have earned this badge by participating in STEM Day 2024!
- **STEAM Challenge patch (All Levels)**
 - All Girl Scouts have completed the activity for November by participating in STEM Day 2024!
- **Oregon Dairy patch (All Levels)**
 - **37:** Tillamook County Creamery Association
 - **41:** Oregon Dairy Women
- **Our Volcano Neighbors patch (All Levels)**
 - **30:** USGS - Cascades Volcano Observatory
 - **54:** Oregon Department of Emergency Management & Oregon Department of Geology and Mineral Industries
 - **57:** Washington State Parks and Recreation Commission
- **Outdoor Career Exploration patch (Cadette, Senior, Ambassador)**
 - **1:** Marion County Sheriff's Search and Rescue
 - **9:** Get Kids into Survey & PLSO

- **10:** Oregon State University Departments of Fisheries & Wildlife and Conservation
- **11:** Oregon Department of Fish and Wildlife - Fisheries
- **14:** Oregon State University College of Forestry
- **15:** World Salmon Council
- **24:** Washington Geological Survey
- **30:** USGS - Cascades Volcano Observatory
- **32:** Oregon Department of Fish and Wildlife - Avian
- **38:** Oregon State University Marine and Geology Repository
- **40:** South Santiam Watershed Council
- **44:** Starker Forests, Inc.
- **47:** Willamette Resources & Educational Network (WREN)
- **48:** Oregon Coast Aquarium
- **49:** Georgia-Pacific
- **51:** Portland Fire & Rescue
- **54:** Oregon Department of Emergency Management & Oregon Department of Geology and Mineral Industries
- **56:** Oregon State University - Plant Pathologist Collins Bugingo
- **57:** Washington State Park and Recreation Commission
- **59:** Friends of Columbia Gorge
- **60:** Oregon Department of Fish and Wildlife - Invasive Aquatics
- **63:** Chemeketa - Biology Department
- **71:** Oregon State University College of Agricultural Sciences
- **74:** Chintimini Wildlife Center
- **76:** Garibaldi Cultural Heritage Initiative
- **Bld 60:** Chemeketa Horticulture Workshop
- **The House That She Built patch (purchase the patch online) (All Levels)**
 - **22:** Hampton Lumber
 - **42:** Architecture Foundation of Oregon
 - **44:** Starker Forests, Inc.
 - **49:** Georgia-Pacific
 - **66:** Ballard Marine Construction
 - **78:** Girls Build
 - **79:** The Rebuilding Center
 - **80:** National Association of Women in Construction (NAWIC)
- **Radio Technology patch (purchase the patch online) (Brownie, Junior, Cadette, Senior, Ambassador)**
 - **Bld 4:** Valley Radio Club of Oregon
- **Robotics badge (All Levels)**
 - **6:** Overcharged Robotics
 - **25:** Team Lego Legends

- **28:** High Voltage - FTC 18108
- **49:** CV Robotics
- **70:** Civil Air Patrol Aerospace Education
- **Bld 4:** Chemeketa- Robotics Workshop
- **Space Science badge (All Levels)**
 - **7:** OregonRocketry
 - **17:** GSOSW Astronomy Club
 - **23:** United Airlines
 - **27:** Air Force Academy
 - **61:** Evergreen Aviation & Space Museum
 - **70:** Civil Air Patrol
 - **Bld 2:** Chemeketa - Planetarium Workshop
- **Automotive Engineering badge (Daisy, Brownie, Junior)**
 - **Bld 4:** Chemeketa- Automotive Workshop
 - **Red Lot:** Chemeketa Truck Driving Workshop
- **Coding Basics badge (Daisy, Brownie, Junior, Cadette)**
 - **31:** Adobe
 - **Bld 6:** Chemeketa- CIS Workshop
- **Mechanical Engineering badge (Daisy, Brownie, Junior)**
 - **7:** OregonRocketry
 - **17:** GSOSW STEM Club
 - **43:** Oregon State University College of Engineering
 - **61:** Evergreen Aviation & Space Museum
- **Animal Observer badge (Daisy)**
 - **10:** Oregon State University Departments of Fisheries & Wildlife and Conservation
 - **11:** Oregon Department of Fish and Wildlife - Fisheries
 - **32:** Oregon Department of Fish and Wildlife - Avian
 - **40:** South Santiam Watershed Council
 - **47:** Willamette Resources & Educational Network (WREN)
 - **48:** Oregon Coast Aquarium
 - **57:** Washington State Park and Recreation Commission
 - **60:** Oregon Department of Fish and Wildlife - Invasive Aquatics
 - **63:** Chemeketa - Biology Department
 - **70:** Orchard Hills Animal Hospital
 - **74:** Chintimini Wildlife Center
 - **76:** Garibaldi Cultural Heritage Initiative
 - **76:** Hiss & Hers
- **Bugs badge (Brownie)**
 - **40:** South Santiam Watershed Council
 - **63:** Chemeketa - Biology Department

- 74: Chintimini Wildlife Center
- **Pets badge (Brownie)**
 - 39: Orchard Hills Animal Hospital
 - 76: Hiss & Hers
- **Animal Habitats badge (Junior)**
 - 10: Oregon State University Departments of Fisheries & Wildlife and Conservation
 - 11: Oregon Department of Fish and Wildlife - Fisheries
 - 32: Oregon Department of Fish and Wildlife - Avian
 - 15: World Salmon Council
 - 40: South Santiam Watershed Council
 - 47: Willamette Resources & Educational Network (WREN)
 - 48: Oregon Coast Aquarium
 - 57: Washington State Park and Recreation Commission
 - 60: Oregon Department of Fish and Wildlife - Invasive Aquatics
 - 63: Chemeketa - Biology Department
 - 74: Chintimini Wildlife Center
 - 75: Garibaldi Cultural Heritage Initiative
 - 76: Hiss & Hers
- **Detective badge (Junior)**
 - 5: Chemeketa - Criminal Justice Programs
 - 52: Oregon Health and Science University Department of Medical and Molecular Genetics
- **Trees badge (Cadette)**
 - 14: Oregon State University College of Forestry
 - 44: Starker Forests Inc.
 - 49: Georgia-Pacific
 - 57: Washington State Park and Recreation Commission
 - Bld 60: Chemeketa- Horticulture
- **Woodworker badge (Cadette)**
 - 14: Oregon State University College of Forestry
 - 44: Starker Forests Inc.
 - 49: Georgia-Pacific
 - 78: Girls Build
 - 79: The Rebuilding Center
 - 80: National Association of Women in Construction (NAWIC)
- **Eating for You badge (Cadette)**
 - 8: Salem Community Health Education Center
 - 41: Oregon Dairy Women
- **Special Agent badge (Cadette)**
 - 5: Chemeketa - Criminal Justice Programs

- 52: Oregon Health and Science University Department of Medical and Molecular Genetics
- **First Aid badge** (Brownie, Junior, Cadette, Ambassador, Senior)
 - 1: Marion County Sheriff's Search and Rescue
 - 20: American Red Cross - Disaster Services
 - 29: American Red Cross - Blood Services
 - 51: Portland Fire & Rescue
 - Bld 8: Chemeketa- Nursing Workshop
- **Science of Sewing patch** (All Levels)
 - 21: The 2nd Drawer Down
- **Art and Design badge** (Daisy, Brownie, Junior)
 - 31: Adobe
 - 49: Georgia-Pacific
- **Seeking Sasquatch patch** (All Levels)
 - 11: Oregon Department of Fish and Wildlife - Fisheries
 - 32: Oregon Department of Fish and Wildlife - Avian
 - 40: South Santiam Watershed Council
 - 44: Starker Forests Inc.
 - 47: Willamette Resources & Educational Network (WREN)
 - 48: Oregon Coast Aquarium
 - 50: Audrey Sauble, Nature Educator
 - 59: Friends of Columbia Gorge
 - 60: Oregon Department of Fish and Wildlife - Invasive Aquatics
 - 74: Chintimini Wildlife Center
 - 75: Garibaldi Cultural Heritage Initiative
 - Bld 60: Chemeketa - Horticulture Workshop
- **Digital Game Design badge** (All Levels)
 - 28: Eterna
 - 31: Adobe
- **Gardener badge** (Junior)
 - 56: Oregon State University - Plant Pathologist Collins Bugingo
 - 71: Oregon State University of Agricultural Sciences
 - Bld 60: Chemeketa - Horticulture Workshop
- **Musician badge** (Junior)
 - 77: Oregon Oldtime Fiddlers Association
- **Car Care badge** (Senior)
 - Bld 4: Chemeketa - Automotive Workshop
 - Red Lot: Chemeketa - Truck Driving Workshop