

Macquarie ICT Innovations Centre presents

ROBOTICS IN THE CLASSROOM

BOSTES Registered Teacher Professional Learning Workshop

Robotics provides a highly engaging medium for creativity, critical thinking, collaboration and communication - four essential skills for learning and ICT within a curriculum context. This workshop promotes independent learning through an inquiry-based approach where participants are encouraged to collaborate and be creative in solving open-ended challenges.

In this workshop, participants will:

- learn the basic features of the robot and programming software
- build a basic robot and participate in guided and open-ended robotics challenges
- document solutions to challenges and upload to an online community
- view and respond to digital resources identifying the benefits of robotics in education
- identify links from activities covered in the workshop to outcomes in the NSW Syllabuses for the Australian Curriculum and discuss ways robotics resources can be managed and integrated into the classroom.



Completing this course will contribute 5 hours of QTC Registered PD addressing 2.1.2, 2.6.2, 3.4.2 from the Australian Professional Standards for Teachers towards maintaining Proficient Teacher Accreditation in NSW.

FACILITATORS

John Burfoot

John is our lead robotics facilitator and a part-time school teacher with the Catholic Education Office in Sydney, specialising in science and robotics. He holds a Bachelor of Education (Primary) degree, a Certificate IV in Training & Assessment, and is a qualified electronics technician. John has facilitated hundreds of robotics workshops to teachers and students across Sydney, including State, Catholic and Independent schools.



Kylie Stanley (Blue-Bot)

Kylie is a Primary Teacher and Early Childhood trained and holds a Diploma in Children's Services. In addition to MacICT, Kylie works as a Project Manager/Research Assistant of a national research project, focusing on student leadership in curriculum development in the Higher Education sector.



Choose from four equipment options for this course:

Taste-tester

Looking at options for K-12

In this workshop, you will gain hands-on experience testing and evaluating the advantages and challenges of up to a dozen different solutions, including BlueBot, LEGO WeDo 2.0, Sphero, KIBO, Cubelets, Edison, LEGO EV3, VEX IQ, mBot, GoPiGo, OzoBot and Hummingbird. Not sure which is right for your school? This is a great place to start.

LEGO® Education WeDo 2.0

Suitable for K-3

WeDo 2.0 introduces young students to robotics and teaches them to build LEGO models featuring working motors and sensors. WeDo 2.0 is designed for use on both desktop and tablet.



LEGO® Education Mindstorms (EV3)

Suitable for Years 4 to 12

The LEGO EV3 robot is a fully-featured robot for Years 4-12 that, in conjunction with the Mindstorms® software, can perform a variety of operations. Students can build, program and test on real-life robotics technology.



Blue-Bot™

Suitable for Pre-school & K-2

Blue-Bots are programmable bluetooth floor robots designed to teach programming and directional language. The Blue-Bot can be controlled using a tablet whereby students can create their very own program on screen, send it remotely and see their Blue-Bot perform the program right before their eyes!



ENROL NOW!

Register online through MyPL@EDU
<https://www.det.nsw.edu.au/docprs/welcome.do>
MyPL Course Code: 151NSR117

NSW DoE teachers: Log into MyPL@Edu with your DoE credentials & search for the course using the above code or course title. Government schools will be charged internally by the NSW Department of Education. This will be reflected on your sundry tax invoice statement.

Non-DoE teachers: You will need to sign up for a username and password to access MyPL. Just click "Don't have a username" on the MyPL website and follow the instructions. Private schools and other institutions will be invoiced by the NSW Department of Education.

Please note: Any cancellations made within 5 days of the course, or no-shows, will be charged to your school.

WHEN There are different dates for each of the different equipment options. See our website for upcoming dates: www.macict.edu.au

TIME 9am-3:30pm

LOCATION North Ryde, NSW

COST \$245 (incl GST)

CONTACT macictsupport@det.nsw.edu.au
Phone: 02 9850 4310