

ENGR 102: Introduction to Engineering II

Robotics Module Task Signoff Sheet

Group Members: _____

Group Number: _____ **Lab Section:** _____

Week 1 – Introduction to NXT Programming

1. Robot Moves Forward 24 inches, then reverses 12 inches

Verified by: _____ *Date:* _____

2. Robot performs a zero point turn and an arc turn of 12 inch radius

Verified by: _____ *Date:* _____

3. Robot traces out assigned shape

Verified by: _____ *Date:* _____

Week 2 – Sensor Characterization

1. Collision detection maneuver performed successfully

Verified by: _____ *Date:* _____

2. Correct ultrasonic sensor response plot and equation

Verified by: _____ *Date:* _____

3. Collision avoidance maneuver performed successfully

Verified by: _____ *Date:* _____

Week 3 – Light Seeking

1. Valid polar plots, showing the directionality of the light sensor with and without shrouding

Verified by: _____ *Date:* _____

2. Robot is able to navigate towards the light source in the *landfill* corner of the arena

Verified by: _____ *Date:* _____

Week 4 – Gripper Design

1. Gripper mechanical CAD design or paper drawing

Verified by: _____ *Date:* _____

2. Working gripper design, robot maintains mobility

Verified by: _____ *Date:* _____