

# Welcome to Mobile Robots AUTO4508

2025

Associate Lecturer Kieran Quirke-Brown, office EE3.11

Consultation time: Mon. 1-2pm or via email

Unit web site:

<http://roblab.org/courses/mobrob/>

## Lab & Project Contacts:

- Xiangrui Kong
- Tiziano Wehrli
- Lee Le

xiangrui.kong@research.uwa.edu.au

tiziano.wehrli@research.uwa.edu.au

lee.le@uwa.edu.au

## Assessment:

- Midterm 40%
- Labs 20% individual
- Project 40% groups of 4 (feedback fruits for marks)
- Total 100%

## Semester Dates:

MOBILE ROBOTS											2025
week	cal-wk	week start	lectures A Wed. (2h)	reading	lectures B Fri. (2h)	reading	project	lab prep.	lab	lab contents	workshop session
1	9	24-Feb	Org., 1.a Introduction 1.b Technology	RA 1+2	1.c Embedded Basics 2.Driving Robots	RA 3+4		EyeSim		RA 5+6 (ER 10)	Python + C++
2	10	3-Mar	14. ROS	ROS	4. Kinematics	RA 7	Pioneer	Splines	1	Lawn mower	linux + VM
3	11	10-Mar	5. Walk + 6.AUV/UAV	RA 8 (ER 11+12)	7. Localization	RA 9 (ER 14)	Pioneer	Distbug	2	Spline driving	git + github
4	12	17-Mar	8. Navigation	RA 10	9. Maps	RA 9 (ER 15)	Pioneer	A*	3	Distbug	Docker + Compose
5	13	24-Mar	10. Vision	RA 11 (ER 16)	11. Automotive	RA 12 (ER 18-21)	Pioneer	Quadtree	4	A*	essential ROS packages
6	15	31-Mar	12. AI-NN, 13. GA	RA 13+14 (ER 17)	14. ROS	ROS	Pioneer				Project presentation part 1
7	16	7-Apr			Exam prep		Pioneer	Brushfire	5	Quadtree	ROS SLAM
8	17	14-Apr			MidTerm		Pioneer				opencv + image processing
break	14	21-Apr					EASTER				
9	18	5-May					Pioneer	Mapping	6	Brushfire	
10	19	28-Apr					Pioneer	NN	7	Mapping	Project preliminary presentations part 2
11	20	5-May					Pioneer	--			
12	21	12-May	Project presentation		Project presentation		Pioneer	--	8	NN	--