

# Course/Capstone/eProject/FURI Purchase Request

Name of Class or Project: EGR 314 (Individual Sensor Subsystem)

Vendor (one vendor per form): Digi-key

Date	Faculty/PI Contact	Student Name & Email	eProject?	Capstone Project?	Course Project?	eProject Industry Sponsor (if applicable)
2/26/25	Nichols / Aukes	David Diaz ddiaz69@asu.edu	Yes / No	Yes / No	Yes / No	n/a

A purchasing card is available to check out for local purchases or you may come to Sutton 101 and order your supplies, using this purchasing card.

Qty	Item # or Quote #	Direct Website Link to Product	General Description of Item	Business Purpose/Benefit for the Purchase	Unit Price
6					
2	ESP32-S3-WROOM-1-N4	<a href="https://www.digikey.com/en/products/detail/espressif-systems/ESP32-S3-WROOM-1-N4">https://www.digikey.com/en/products/detail/espressif-systems/ESP32-S3-WROOM-1-N4</a>	ESP32 Microcontroller	Required for main processing & communication	\$ 5.06
2	OPT4060DTSR	<a href="https://www.digikey.com/en/products/detail/texas-instruments/OPT4060DTSR">https://www.digikey.com/en/products/detail/texas-instruments/OPT4060DTSR</a>	Color Sensor	Detects RGBW colors for sensor-based decisions	\$ 2.880
2	LM2575D2T-3.3R4G	<a href="https://www.digikey.com/en/products/detail/onsemi/LM2575D2T-3.3R4G">https://www.digikey.com/en/products/detail/onsemi/LM2575D2T-3.3R4G</a>	Voltage Regulator	Converts 12V to 3.3V for stable power	\$ 3.320
3	SRR1260-331K	<a href="https://www.digikey.com/en/products/detail/bourns-inc/SRR1260-331K">https://www.digikey.com/en/products/detail/bourns-inc/SRR1260-331K</a>	330µH Inductor	Supports power regulation and noise filtering	\$ 0.960
3	MF-MSMF150/12	<a href="https://www.digikey.com/en/products/detail/bourns-inc/MF-MSMF150/12">https://www.digikey.com/en/products/detail/bourns-inc/MF-MSMF150/12</a>	PTC Resettable Fuse	Protects circuit from overcurrent damage	\$ 0.220
3	SS14	<a href="https://www.digikey.com/en/products/detail/onsemi/SS14/965729?qc=1">https://www.digikey.com/en/products/detail/onsemi/SS14/965729?qc=1</a>	Schottky Diode	Prevents reverse voltage damage	\$ 0.290
4	EEH-ZA1E101XP	<a href="https://www.digikey.com/en/products/detail/panasonic-electronic-components/EEH-ZA1E101XP">https://www.digikey.com/en/products/detail/panasonic-electronic-components/EEH-ZA1E101XP</a>	100µF Capacitor	Stabilizes power supply voltages	\$ 1.440
4	C5750X5R1A686M230KA	<a href="https://www.digikey.com/en/products/detail/tdk-corporation/C5750X5R1A686M230KA">https://www.digikey.com/en/products/detail/tdk-corporation/C5750X5R1A686M230KA</a>	68µF Capacitor	Filters voltage fluctuations	\$ 2.820
4	CL10B104KB8NNNC	<a href="https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL10B104KB8NNNC">https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL10B104KB8NNNC</a>	0.1µF Capacitor	Reduces high-frequency noise	\$ 0.080
6	CRCW060310K0FKEA	<a href="https://www.digikey.com/en/products/detail/vishay-dale/CRCW060310K0FKEA">https://www.digikey.com/en/products/detail/vishay-dale/CRCW060310K0FKEA</a>	10kΩ Resistor	Pull-up/pull-down for circuits	\$ 0.100
6	ERA-3AEB331V	<a href="https://www.digikey.com/en/products/detail/panasonic-electronic-components/ERA-3AEB331V">https://www.digikey.com/en/products/detail/panasonic-electronic-components/ERA-3AEB331V</a>	330Ω Resistor	Current limiting for LEDs	\$ 0.100
6	CRGQ0805F220R	<a href="https://www.digikey.com/en/products/detail/te-connectivity-passive-products/CRGQ0805F220R">https://www.digikey.com/en/products/detail/te-connectivity-passive-products/CRGQ0805F220R</a>	220Ω Resistor	Load balancing for circuits	\$ 0.100
2	640456-3	<a href="https://www.digikey.com/en/products/detail/te-connectivity-amp-connectors/640456-3">https://www.digikey.com/en/products/detail/te-connectivity-amp-connectors/640456-3</a>	3-Pin Header (Through Hole)	Connects peripherals to PCB	\$ 0.170
2	ESB-33535A	<a href="https://www.digikey.com/en/products/detail/panasonic-electronic-components/ESB-33535A">https://www.digikey.com/en/products/detail/panasonic-electronic-components/ESB-33535A</a>	Push Button Switch	User input for reset or control	\$ 1.980
2	USB3131-30-0230-A	<a href="https://www.digikey.com/en/products/detail/gct/USB3131-30-0230-A">https://www.digikey.com/en/products/detail/gct/USB3131-30-0230-A</a>	USB Micro-B Connector	Enables USB connectivity	\$ 0.770
2	PJ-002BH-SMT-TR	<a href="https://www.digikey.com/en/products/detail/same-sky-formerly-cui-devices/PJ-002BH-SMT-TR">https://www.digikey.com/en/products/detail/same-sky-formerly-cui-devices/PJ-002BH-SMT-TR</a>	Barrel Jack Connector	Power input from adapter	\$ 1.010

Sub-Total

Chair or PI Approval:

Date:

2/27/2025

Tax

Shipping

Grand Total

Business Purpose/Public Benefit: (Click on yellow line. Next, select an option on the drop-down arrow on the right of the box)

Lab / Classroom / Medical Supplies

Medical Lab Supplies Accessories & Supplies:

Business Purpose: materials purchased to stock and run the departmental labs and classrooms, used by students and departmental employees. Also for student ordering for projects and to assist with Research Projects.

Public Benefit: Supplies are used in day-to-day lab operations. ASU benefits from this expense as the supplies purchased allow departmental lab employees and students to perform general lab duties, projects and class activities and to assist with Research Projects.

Accounts: State, Local (Sponsored and Foundation only if authorized)

Student: Forward completed form to Instructor/Project Mentor for approval

Mentor/Faculty: Forward form with email indicating your approval to PolyBizz@asu.edu for processing

1. A purchasing card is available to check out for local purchases. 2. You may come to Sutton 101 and place your order online.

## SECTION BELOW IS FOR OFFICE USE ONLY

ORDER PLACED BY / DATE: \_\_\_\_\_

B.O. NOTIFIED BY / DATE: \_\_\_\_\_

ORDER RECEIVED BY / DATE: \_\_\_\_\_

STUDENT / INSTRUCTOR NOTIFIED BY / DATE: \_\_\_\_\_

COST CENTER + PROGRAM/GIFT TO CHARGE: \_\_\_\_\_



Line Total	
\$	-
\$	10.12
\$	5.76
\$	6.64
\$	1.92
\$	0.66
\$	0.87
\$	5.76
\$	11.28
\$	0.32
\$	0.60
\$	0.60
\$	0.60
\$	0.34
\$	3.96
\$	1.54
\$	2.02
\$	52.99
\$	52.99



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