

# Book & Tool List

## ROBOTICS AND COMMUNICATIONS SYSTEMS ENGINEERING TECHNOLOGY

### Advanced Technical Certificate: Laser/Electro-Optics Technology

#### Book List for ATC – Laser/Electro-Optics Technology

| Course                          | Course Title                            | Book Title                                                      | ISBN          | Cost            |
|---------------------------------|-----------------------------------------|-----------------------------------------------------------------|---------------|-----------------|
| RCET 1153A                      | Basic Electricity and DC Circuit Theory | Emotional Intelligence 2.0 – w/Passcode, 09 Ed.                 | 9780974320625 | 34.99           |
| COMM 1101                       | Fundamentals of Oral Communication      | Fund. Of Oral Communication Access Code                         | 9781644850817 | 78.57           |
| ENGL 1101                       | Writing and Rhetoric I                  | Perusall Access – Everyone's an Author W/R, 4 <sup>th</sup> Ed. | 2818440009310 | 65.06           |
| PHYS 1101<br>(Obj. 5<br>Option) | Elements of Physics                     | Perusall Access – College Physics 1E, 16 Ed.                    | 9781947172012 | 14.27           |
| TOTAL                           |                                         |                                                                 |               | <b>\$192.89</b> |

#### Course Fees for ATC – Laser/Electro-Optics Technology

| Course     | Course Title                            | Fee             |
|------------|-----------------------------------------|-----------------|
| RCET 1155A | Basic Electricity and DC Circuit Lab    | 50.00           |
| RCET 1155B | Basic Electricity and AC Circuit Lab    | 80.00           |
| RCET 1156A | Analog Control Devices Laboratory       | 60.00           |
| RCET 1156B | Digital Control Devices Laboratory      | 40.00           |
| RCET 2253  | Systems Analog and Digital Laboratory   | 75.00           |
| RCET 2271  | Introduction to Lab Simulation Software | 35.00           |
| RCET 3332  | Laser Systems and Optics Laboratory     | 35.00           |
| TOTAL      |                                         | <b>\$375.00</b> |

#### Other Fees for ATC – Laser/Electro-Optics Technology

| Description    | Fee           |
|----------------|---------------|
| Locker deposit | 5.00          |
| TOTAL          | <b>\$5.00</b> |

## Tools/Supplies for ATC – Laser/Electro-Optics Technology

| Quantity                 | Description                                                                                                                                                                                                                                                                                                                | Cost     |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1                        | Laptop/Notebook Computer (No MAC or Linux OS)<br>Specifications:<br>Processor: 15<br>Memory (RAM): 4GB<br>Hard Drive: 250GB<br>Optical Drive: CD-RW/DVD<br>Wireless: 802.11 b/g<br>Ethernet: 1 GB<br>Battery Life: 3-4 Hours<br>Warranty: 3 Years<br>Operating System: Windows 10<br>Software: MS Office, Office Suite     | 1,000.00 |
| 1 or 2 for each semester | Tops Computation Notebook #35126<br>(Available in Tech Office)                                                                                                                                                                                                                                                             | 10.00    |
| 1 for each semester      | Single subject spiral notebooks                                                                                                                                                                                                                                                                                            | 3.00     |
| 1                        | Jump drive, 8GB or higher                                                                                                                                                                                                                                                                                                  | 20.00    |
| 1                        | Digital Micrometer 6"                                                                                                                                                                                                                                                                                                      | 2.00     |
| 1                        | PACE Soldering Tip                                                                                                                                                                                                                                                                                                         | 24.00    |
| 1                        | Tape, metric measure (optional)                                                                                                                                                                                                                                                                                            | 5.00     |
| 1                        | Tool Kit (sold by Robotics Club)<br>DMM<br>JMP Wires<br>Safety Glasses<br>ESDTWEEZER Kit<br>Strippers<br>Diagonal Cutter<br>Needle Nose<br>4-1 Screw Driver<br>Soldering Iron Stand<br>Bread Board<br>Resistor Kit<br>Capacitor Kit<br>Solder Kit<br>Heat Sinks<br>Desoldering Wick<br>Precision Screw Drivers<br>Tool Bag | 196.00   |
| 1                        | Digital Volt-Ohm-Millampmeter<br>Specifications:<br>DC Voltage Ranges = 2V, 20V, 200V, 600V<br>Resistance Ranges = >200V, 2K, 200K, 2M, 20M                                                                                                                                                                                | 70.00    |

| Quantity | Description                                | Cost              |
|----------|--------------------------------------------|-------------------|
|          | AC Current Ranges = >200Ma, 20a            |                   |
|          | DC Current Ranges = >20A, 200A, 200Ma, 10A |                   |
|          | Input Impendence = 10-12M                  |                   |
|          | <b>TOTAL</b>                               | <b>\$1,330.00</b> |

## Summary

|                |             |
|----------------|-------------|
| Tuition        | \$16,549.00 |
| Books          | \$192.89    |
| Fees           | \$380.00    |
| Tools/Supplies | \$1,330.00  |
| Program Total  | \$18,451.89 |

*\*Costs listed are estimations and should not be considered a guarantee.*