

Associate in Applied Science
Toward a Degree in
**Biomedical Electronics
Technology**

FIRST YEAR – FALL SEMESTER

| Dept. | No. | | Hrs. | Grade |
|-------|-----|--|-----------|-------|
| ORI | 100 | College 101 | 1 | _____ |
| ALH | 217 | Medical Terminology I | 3 | _____ |
| ELT | 102 | Basic Electricity and Wiring | 4 | _____ |
| ELT | 111 | Digital Electronics I | 3 | _____ |
| ENG | 101 | English Composition I or ENG 113 Professional Technical Writing | 3 | _____ |
| MAT | 113 | or MAT 112 Introduction to Contemporary Mathematics | 3 | _____ |
| | | | <u>17</u> | |

NOTES AND INFORMATION

| <u>Fall only courses:</u> | | <u>Spring only courses:</u> | | |
|---------------------------|---------|-----------------------------|---------|---------|
| ELT 111 | ELT 250 | ELT 103 | ELT 210 | ELT 280 |
| ELT 151 | | ELT 112 | ELT 215 | |
| ELT 200 | | ELT 150 | ELT 218 | |
| ELT 214 | | ELT 170 | ELT 220 | |

¹ Requires a grade of "C" or higher.

FIRST YEAR – SPRING SEMESTER

| Dept. | No. | | Hrs. | Grade |
|-------|-----|---|-----------|-------|
| ELT | 103 | Applied DC/AC Circuits | 4 | _____ |
| ELT | 112 | Digital Electronics II | 3 | _____ |
| ELT | 150 | Applied Solid State Electronics | 3 | _____ |
| ELT | 170 | Biomedical instrumentation I | 3 | _____ |
| COM | 115 | Speech or COM 116 Interpersonal Communications | 3 | _____ |
| - | | | <u>16</u> | |

Additional Information: This two-year program is designed to provide a thorough understanding of DC/AC fundamentals, solid state electronics, digital electronics, microprocessor operations, and biomedical instruments. Upon completion of this program, the student will be awarded an associate degree in biomedical electronics technology. For students entering the program with prior education or on-the-job experience, it is possible to test out of the basic courses. For additional information, students should see their advisor or the chairperson of the Division of Applied Technologies.

Career Opportunities: Graduates of this program have career opportunities in entry level biomedical positions. Technicians install, use, maintain, and train healthcare personnel on cutting-edge medical technology. In addition, they support medical staff in the use of technology, help acquire medical equipment, coordinate vendor contracts and play a key role in investigating device related problems. The program also prepares students for the written portion of the Certified Biomedical Equipment Technician exam.

SECOND YEAR – FALL SEMESTER

| Dept. | No. | | Hrs. | Grade |
|-------|-----|--|-----------|-------|
| ELT | 151 | Applied Solid State Circuits | 3 | _____ |
| ELT | 200 | Introduction to Microprocessors | 3 | _____ |
| ELT | 214 | Fundamentals of Computing Hardware | 3 | _____ |
| ELT | 250 | Biomedical Instrumentation II | 3 | _____ |
| PHY | 121 | Technical Physics | 3 | _____ |
| IAI | | Social and Behavioral Science Elective | 3 | _____ |
| | | | <u>18</u> | |

JALC ELT Programs are education members of:



Association for the Advancement of Medical Instrumentation®
901 N. Glebe Road, Suite 300
Arlington, VA 22203

SECOND YEAR – SPRING SEMESTER

| Dept. | No. | | Hrs. | Grade |
|-------|-----|---|-----------|-------|
| ELT | 210 | Supporting Computer Operating Systems | 3 | _____ |
| ELT | 215 | IOT and Embedded Systems | 3 | _____ |
| ELT | 218 | Introduction to Network Technologies | 3 | _____ |
| ELT | 220 | Special Projects in Electronics | 3 | _____ |
| ELT | 280 | Biomedical Instrumentation III | 3 | _____ |
| | | | <u>15</u> | |

John A. Logan College reserves the right to modify this curriculum guide as needed. Please verify with your academic advisor the accuracy and timelines of this document.