

Southwestern Indian Polytechnic Institute  
 Department of Advanced Technical Education  
 PROGRAM OF STUDY – ASSOCIATE OF APPLIED SCIENCE  
 INSTRUMENTATION AND CONTROL TECHNOLOGY – 15.0404

Student \_\_\_\_\_ ID Number \_\_\_\_\_  
 Last First MI

Entry or Readmission Date \_\_\_\_\_ Advisor \_\_\_\_\_

SIPI Catalog Edition: 2006

**TECHNICAL PROGRAM REQUIREMENT (31 Cr. Hrs. Required)**

| <u>Course No.</u> | <u>Course Title</u>               | <u>Credit</u> | <u>Term/Year</u> | <u>Grade</u> | <u>Accepted as Transfer or Substitute Course</u> |
|-------------------|-----------------------------------|---------------|------------------|--------------|--|
| ELEC 101A         | Basic DC Electronics              | 3             | _____            | _____        | _____  |
| ELEC 101L         | Basic DC Electronics Lab          | 2             | _____            | _____        | _____  |
| ELEC 105A         | Basic AC Electronics              | 3             | _____            | _____        | _____  |
| ELEC 105L         | Basic AC Electronics Lab          | 2             | _____            | _____        | _____  |
| ELEC 110A         | Semiconductor Fundamentals        | 3             | _____            | _____        | _____  |
| ELEC 110L         | Semiconductor Fundamentals Lab    | 2             | _____            | _____        | _____  |
| ELEC 118L         | Electromechanical Control Devices | 3             | _____            | _____        | _____  |
| ELEC 201A         | Digital Electronics               | 3             | _____            | _____        | _____  |
| ELEC 202L         | Digital Electronics Lab           | 2             | _____            | _____        | _____  |
| ELEC 205A         | Microprocessors                   | 3             | _____            | _____        | _____  |
| ELEC 206L         | Microprocessors Lab               | 2             | _____            | _____        | _____  |
| ELEC 218L         | Electromechanical Control Systems | 3             | _____            | _____        | _____  |

**ACADEMIC REQUIREMENT (38 Cr. Hrs. Required)**

**Communication (6 Cr. Hrs. Required)**

|          |                         |   |       |       |       |
|----------|-------------------------|---|-------|-------|-------|
| ENGL 101 | Composition             | 3 | _____ | _____ | _____ |
| ENGL 119 | Technical Communication | 3 | _____ | _____ | _____ |

**Mathematics (13 Cr. Hrs. Required)**

|          |                          |   |       |       |       |
|----------|--------------------------|---|-------|-------|-------|
| MATH 121 | College Algebra          | 3 | _____ | _____ | _____ |
| MATH 123 | Trigonometry             | 3 | _____ | _____ | _____ |
| MATH 150 | Advanced College Algebra | 3 | _____ | _____ | _____ |
| MATH 162 | Calculus I               | 4 | _____ | _____ | _____ |

**Computer Science (12 Cr. Hrs. Required)**

|          |                              |   |       |       |       |
|----------|------------------------------|---|-------|-------|-------|
| ITCT 111 | IT Essentials I (A+)         | 3 | _____ | _____ | _____ |
| ITCT 112 | IT Essentials II (Server+)   | 3 | _____ | _____ | _____ |
| COSC 145 | Intro to UNIX/Administration | 3 | _____ | _____ | _____ |
| COSC 121 | Introduction to Programming  | 3 | _____ | _____ | _____ |

**Laboratory Science (4 Cr. Hrs. Required)**

|           |                     |   |       |       |       |
|-----------|---------------------|---|-------|-------|-------|
| PHYS 151  | General Physics     | 3 | _____ | _____ | _____ |
| PHYS 151L | General Physics Lab | 1 | _____ | _____ | _____ |

**Humanities/Fine Arts or Social/Behavioral Science**

**Elective (3 Cr. Hrs. Required)**

|       |       |   |       |       |       |
|-------|-------|---|-------|-------|-------|
| _____ | _____ | 3 | _____ | _____ | _____ |
|-------|-------|---|-------|-------|-------|

Select from: ARTH 101, ARTH 102, ARTH 131, GEOG 101, HIST 101, HIST 161, HIST 162, HIST 181, LITR 211, LITR 270, LITR 296, NAVA 101, NAVA 102, NAVA 103, SPAN 101, SPAN 102, ANTH 101, ANTH 130, PSYC 105, POSC 110, POSC 200, SOSC 101, or SOSC 210

**TOTAL CREDIT HOURS REQUIRED FOR AN ASSOCIATE IN APPLIED SCIENCE DEGREE: 69**

Note: The minimum grade requirement for awarding an Associate of Applied Science Degree in Instrumentation and Control Technology is a "C" or better in all required courses.

January 26, 2006

**Approvals:**

\_\_\_\_\_  
 Department Chair, Advanced Technical Education

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 Vice President of Academic Programs