COURSE: AUTOMATION USING MICRO CONTROLLERS
CODE: IP0252
TIME INTENSITY: 1 hour/week
MODALITY: Laboratory
PRE-REQUIREMENTS: IP0250
CO-REQUIREMENTS: None
CREDITS: 1 credit

1. GENERAL OBJECTIVE:
Design, develop and implement an automation system using the technology of micro controllers.

2. CONTENTS:
- Basic concepts of electronics.
- Logic Gates.
- Management of resistive loads, motors, relays and transistors
- Basic concepts of micro controllers.
- Programming-simulation software
- Programming Structures (While, if / else)
- Programming Structures (for, switch and rotation)
- Timers & counters
- Management of display
- LCD display Management
- Keyboarding management
- Digital analog conversion
- ON-OFF Controller

3. EVALUATION:

<table>
<thead>
<tr>
<th>Type of evaluation</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops</td>
<td>40%</td>
</tr>
<tr>
<td>Micro controllers quiz</td>
<td>30%</td>
</tr>
<tr>
<td>Final work</td>
<td>30%</td>
</tr>
</tbody>
</table>

4. BIBLIOGRAPHY:
Support documents in EAFIT Interactiva.