**DEPARTMENT** Materials Engineering

**DATE SUBMITTED** 3/28/03

**PURPOSE**
1. Deletion of a course
2. New course with supporting documents
3. Add existing course offered at another campus
4. Change in course number at same level
5. Downgrading of course level
6. Upgrading of course level
7. Change in course title
8. Change in semesters offered
9. Change in course credit/type
10. Change in course attributes
11. Change in instructional hours
12. Change in prerequisites
13. Change in description of course content
14. Transfer of course from one dept. to another

**EXISTING:**

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>MSE</th>
</tr>
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<tbody>
<tr>
<td>Course Number</td>
<td>581</td>
</tr>
</tbody>
</table>

**PROPOSED:**

<table>
<thead>
<tr>
<th>Scanning Electron Microscopy Skills</th>
</tr>
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</table>

**SEMESTERS OFFERED**

<table>
<thead>
<tr>
<th>Summer</th>
<th>Fall</th>
<th>Ag Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td>✔</td>
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<td>✔</td>
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</table>

**Proposed Title** Scanning Electron Microscopy Skills

**Variable Title**

- Yes       - No  ✔

**Abbreviated Title** SEM Skills

Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

**CROSS LISTED COURSES**

<table>
<thead>
<tr>
<th>Instructional Type</th>
<th>Class</th>
<th>FTE</th>
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</thead>
<tbody>
<tr>
<td>Primary</td>
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</tr>
<tr>
<td>Secondary</td>
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<td></td>
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<tr>
<td>Laboratory</td>
<td>3</td>
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</tbody>
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**COURSE DESCRIPTION (PREREQUISITES INCLUDED):**

Sem. 1, 2, SS. Class 3, lab 3, (weeks 1-5) cr. 1. Admission by consent of instructor. 

Components and operation of the scanning electron microscope (SEM). Limits to resolution; signals, detectors, and imaging modes; interpretation of results. Laboratory sessions emphasize the practical operation of the instrument and culminate in a test of student skills. This course must be completed before undertaking any SEM research in the School of Materials Engineering. Professors King and Kwam.

**CAMPUS(ES) INVOLVED**

- Calumet
- Fort Wayne
- Indianapolis
- North Central
- West Lafayette
- Off Campus

**Offered as**

- Available pass/not-pass only

**APPROVED** 10/16/03

**OFFICE OF THE REGISTRAR**