ACCE Required Public Information

Objectives of the Program

Program Goals:
The goal of the Construction Management Technology program is the preparation of well educated professionals for challenging careers in the construction industry. Emphasis is placed on preparing professionals who are capable of managing the total construction process. Graduates qualify for employment with general contracting and subcontracting firms and in government.

Student Learning Outcomes:
Students who complete the B.S. degree in Construction Management Technology will be expected to demonstrate successful achievement of the following:

- Demonstrate an operational knowledge of the techniques associated with the design, construction and maintenance of residential and commercial structures.
- Exercise independent judgment in expediting and scheduling work without jeopardizing its effectiveness, safety or cost.
- Organize and manage personnel, materials and equipment for carrying out construction, maintenance and operation of complex structural systems.
- Demonstrate effective communication of ideas by means of spoken and written language as well as graphic techniques.
- Solve technical problems that translate ideas into functioning, machines, structures and systems.
- Improve the professional technical practice of Construction Management through continuing education and community service.
- Demonstrate humanistic values and responsibilities that promote active participation as productive citizens.

Program Admission Requirements

Department of Technology's Construction Management Technology program follows the admission guidelines for the University, i.e.

- High School Student Applicant - 2.50 overall grade point average/850 SAT (Math/Read)
- Transfer Student Applicant - 2.0 overall grade average/must submit high school transcript if less than 28 credits.
- International Applicant - Need to pass 5 English subjects from their high school with a “C” average or better. If they are from an English speaking country then they are not require take the TOEFL. If the applicant has been to foreign college then UMES needs the official transcript along with a foreign credentials evaluation. The applicant needs to fill out and send a certificate of finance along with a bank statement showing $23,000 is available to pay for their education along with a certificate of finance.

Student Achievement

- Elizabeth Hussein started in the COOP program of UMES with a local Construction Company (Grunley) as the first CMT student in this program and she has now accepted the offer from Grunley Construction Company for a full time position starting in May 2014 after her graduation in the four year program.
- Miroslava Papinova was the recipient of a $3,000.00 scholarship plus a $2,000.00 endowment for ABC chapter in Washington metro area.
- Shaquille Turner, Member Phi Beta Sigma Fraternity incorporated 2013.
- Shaquille Turner, National society of Leadership and Success 2012.
- Shaquille Turner, Deans List 2012.
- Shaquille Turner, Vice President Student constructor’s Chapter Association 2013.
Rate and Types of Employment of Graduates

<table>
<thead>
<tr>
<th>Placement Rate of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepted Job Offer</td>
</tr>
<tr>
<td>71%</td>
</tr>
</tbody>
</table>

**Job Titles**
- Architect
- Corporate Drafter
- Estimator
- Project Engineer/Manager
- Site Engineer

**Hiring Companies**
- Connection Education
- Custom Mechanical Services, Inc.
- Domino’s Sugar, American Sugar Refining Inc.
- European Design Contractor
- Fort Myer Construction Corp
- Foulger-Pratt Contracting
- Graduate Studies at University of Maryland College Park
- Gilbane Construction
- Grunley Construction
- KCI Technologies
- Kofamtec & Design Build Concept
- M. Barbose Construction Company
- Modern Construction Solutions
- National Park Service
- Oak Contracting, LLC
- Therron Waddell, Inc.
- The Whiting-Turner Contracting Company
- Willow Construction, LLC
Program Quality Improvement Plan

Figure 1: UMES Student Learning Outcomes Assessment Process (SLOAP)
### Department of Technology: Bachelor’s Degree in Construction Management Technology

<table>
<thead>
<tr>
<th>Program Goals</th>
<th>Expected Student Learning Outcomes</th>
<th>Instruction</th>
<th>Method &amp; Criteria of Assessment &amp; Analysis</th>
<th>Summary of Results</th>
<th>Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal</strong></td>
<td>Students that complete the Bachelor of Science degree in Construction Management Technology will be able to:</td>
<td>Capstone courses include the following:</td>
<td><strong>Internships:</strong> Six to eight week summer management assignment with a residential or commercial contractor or construction management firm.</td>
<td>A summary of the results of graduate surveys, senior exit surveys, employer surveys, advisory council suggestions and student performance on tests, quizzes, laboratory activities, projects, research papers, reports and internships are reviewed and evaluated individually and collectively by faculty each semester.</td>
<td>The results are analyzed to determine if changes need to be made.</td>
</tr>
<tr>
<td></td>
<td>Demonstrate an operational knowledge of the techniques associated with the design, construction and maintenance of residential and commercial structures.</td>
<td>CMTE 295 - Construction Management Internship I</td>
<td></td>
<td>Students performing below average are identified and advised.</td>
<td>If a significant number of students are deficient, changes are made in instructional strategies or methods.</td>
</tr>
<tr>
<td></td>
<td>Exercise independent judgment in expediting and scheduling work without jeopardizing its effectiveness, safety or cost.</td>
<td>CMTE 395 - Construction Management Internship II</td>
<td><strong>Employer Evaluation Criteria:</strong></td>
<td>Special tutoring support is provided as needed.</td>
<td>Curriculum changes are also predicated on accreditation standards/reviews and recommendations by the American Council for Construction Education (ACCE).</td>
</tr>
<tr>
<td></td>
<td>Organize and manage personnel, materials and equipment for carrying out construction, maintenance and operation of structural systems.</td>
<td>CMTE 458 - Senior Seminar</td>
<td>-Number of times absent/times late</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstrate effective communication of ideas by means of spoken and written language as well as graphic techniques.</td>
<td>CMTE 414 – Structural Design II</td>
<td>-Attention to detail (Technical skills)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solve technical problems that translate ideas into</td>
<td></td>
<td>-Appearance/Presentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Attitude (willingness to participate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Cooperation (ability to get along with co-workers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Communications oral activities carried out satisfactorily</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Completion of written assignments</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Instrument rating scale:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 – Exceptional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Goals</td>
<td>Expected Student Learning Outcomes</td>
<td>Instruction</td>
<td>Method &amp; Criteria of Assessment &amp; Analysis</td>
<td>Summary of Results</td>
<td>Use of Results</td>
</tr>
<tr>
<td>---------------</td>
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<td>-------------</td>
<td>------------------------------------------</td>
<td>--------------------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>functioning, machines, structures and systems.</td>
<td></td>
<td>3 - Competent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improve the professional technical practice of Construction Management through continuing education and community service.</td>
<td></td>
<td>2 - Needs improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstrate humanistic values and responsibilities that promote active participation as productive citizens.</td>
<td></td>
<td>1 - Unsatisfactory</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Readily find employment in construction and related industries.</td>
<td></td>
<td>Faculty Visitation: Interview/feedback from supervisor</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Final Assessment Grading is: S – satisfactory U – unsatisfactory</td>
<td></td>
<td>-If student performance is overall positive an S is given.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior Seminar: Oral Presentation: Appearance, professionalism, voice projection, verbal skills, etc.</td>
<td></td>
<td>-If student performance is considered to be deficient an unsatisfactory is given.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Use of graphics, charts, visual aids, etc.</td>
<td></td>
<td>Senior Seminar: Oral Presentation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Logic, order, clarity, technical accuracy,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Goals</td>
<td>Expected Student Learning Outcomes</td>
<td>Instruction</td>
<td>Method &amp; Criteria of Assessment &amp; Analysis</td>
<td>Summary of Results</td>
<td>Use of Results</td>
</tr>
<tr>
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<td>-------------------------------------------</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>organization, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Response to questions concerning written research findings.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Written Paper:</strong></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Content original and specific to the topic.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Organization, and appearance, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Spelling, grammar, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Assumptions and Qualifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Completeness</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Instrument rating scale same as above.</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Program Assessment Measures**

- Construction Graduates surveyed six months to one year after graduation. Survey all graduates (up to five years out) every three years.
- Advisory Council members complete survey questionnaires annually at one of its meetings.
- Employers surveyed by telephone or by mail every three years.
- Seniors and students surveyed each year.
- UMES Graduating Students Exit Interview Questionnaire.

**Information Obtained from Assessment Measures**

UMES CMT Graduating Students Exit Interview Questionnaire (May 2013, December 2013, May 2014)

1. My major is:
   Construction Management Technology (CMT)

2. I will be receiving:
   Bachelors

3. My cumulative G.P.A. is:
   - 2.00 to 2.50 0%
   - 2.51 to 3.0 25%
   - 3.01 to 3.50 40%
   - 3.51 to 4.00 35%

4. Why did you choose UMES for your education?
   - Quality of the program 19%
   - Someone I know attended UMES 6%
   - Because it is a Historically Black Institution 3%
   - Low cost 29%
   - Because it has special appeal to me 10%
   - Other 32%

5. What did you enjoy most at UMES as student?
   - Academic activities 10%
   - Social activities 0%
   - Extracurricular activities 5%
   - Location of campus 85%
   - Other 0%

6. What did you enjoy least at UMES as student?
   - Academic activities/interaction 16%
   - Social activities/interaction 26%
   - Extra curricular activities 11%
   - Location of campus 5%
   - Other 42%
7. Will you recommend UMES to another student?  
   Yes  94%  
   No   6%

8. How would you rate the quality of education you received at UMES?  
   Very High  11%  
   High      44%  
   Average Low  44%

9. Did you receive any financial Aid?  
   Yes  47%  
   No   53%

10. If you did not receive financial aid, would you have been financially able to complete your degree with out it?  
    Yes  61%  
    No   39%

11. What was your attendance status?  
    Full-time  83%  
    Part-Time  17%

12. Are you enrolled in or planning to attend graduate or professional school?  
    Yes  55%  
    No   45%

13. If planning to attend graduate or professional school, how well did our institution prepare you?  
    Excellent  31%  
    Good      54%  
    Adequate  15%  
    Inadequate  0%

14. Have you accepted a job?  
    Yes  71%  
    No   29%

15. If you have accepted a job, is it related to your major?  
    Yes  92%  
    No   8%

16. If you were to do it over, would you attend our institution again?  
    Yes  67%  
    Not Sure  33%  
    No   0%

17. I am:  
   Female  26%  
   Male   74%

18. My age range is:  
    25 years or less  39%  
    26 to 35 yrs  28%  
    36 to 40 years  17%  
    41 or older  17%

19. I am:
African American 16%
Hispanic 16%
Native American 0%
Caucasian 32%
International 11%
None 11%
Other 16%

**Actions Taken as a Result of Assessment Data Collected**

- Integrating a new course in Green Building into the Construction Management Technology Curriculum
- Expanding 2+2 Articulation Agreements to include Delaware Technical Community College and Anne Arundel Community College.

**Data to Support Qualitative Claims Made by the Program**

See next page.
### Survey of UMES CMT Graduates (May 2013, December 2013, May 2014)

1. **What is your present employment status?**
   - a
   - b
   - c
   - d
   - e
   - 4
   - 80%
   - 0%
   - 0%
   - 0%
   - 0%
   - 20%

2. **When did you begin working in your present employment?**
   - a
   - b
   - c
   - d
   - e
   - f
   - 0%
   - 20%
   - 20%
   - 20%
   - 20%

3. **What is your approximate annual salary?**
   - a
   - b
   - c
   - d
   - e
   - f
   - 0%
   - 0%
   - 0%
   - 0%
   - 100%
   - 0%

4. **At what level do you think the Faculty in the Department of Technology exhibited technical competence and professionalism?**
   - Excellent
   - Above Average
   - Average
   - Below Average
   - Poor
   - 2
   - 1
   - 0%
   - 40%
   - 40%
   - 20%
   - 0%

5. **In your opinion did, did the knowledge and skills acquired while enrolled in the Construction Management Program at UMES enhance your chances of being employed in the field which you are now working?**
   - Yes
   - No
   - 3
   - 100%
   - 0%

6. **In what manner, if any, are you continuing your education?**
   - a
   - b
   - c
   - d
   - e
   - 1
   - 0%
   - 40%
   - 0%
   - 40%

7. **How would you rate the advisement and counseling you received from faculty in the CMT program?**
   - Excellent
   - Above Average
   - Average
   - Below Average
   - Poor
   - 2
   - 1
   - 1
   - 1
   - 0%
   - 40%
   - 20%
   - 20%
   - 0%
UMES CMT Undergraduate Students Exit Interview Questionnaire (May 2013, December 2013, May 2014)

1. How long have you been working towards your bachelor's degree?

<table>
<thead>
<tr>
<th>Years</th>
<th>4 years or less</th>
<th>4.5 years</th>
<th>5 years</th>
<th>5.5 years</th>
<th>6 years or over</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>46%</td>
<td>8%</td>
<td>15%</td>
<td>8%</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

2. Are you a transfer student?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>46%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Who or what provided information to you about the CMT program?

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>38%</td>
<td>19%</td>
<td>6%</td>
<td>6%</td>
<td>19%</td>
<td>13%</td>
<td></td>
</tr>
</tbody>
</table>

4. Why did you chose CMT program at UMES?

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>57%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
<td></td>
</tr>
</tbody>
</table>

5. In general, how satisfied are you with the CMT program?

<table>
<thead>
<tr>
<th>Satisfied</th>
<th>Very Satisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>46%</td>
<td>46%</td>
<td>8%</td>
<td>0%</td>
</tr>
</tbody>
</table>

6. At what level do you think the faculty in the Department of Technology exhibited technical competence and professionalism?

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Above Average</th>
<th>Average</th>
<th>Below Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>46%</td>
<td>31%</td>
<td>23%</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

7. How would you rate the advisement and counseling you received from faculty in the CMT program?

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Above Average</th>
<th>Average</th>
<th>Below Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>69%</td>
<td>8%</td>
<td>23%</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

8. Will you be pursuing another degree?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>62%</td>
<td>38%</td>
<td></td>
</tr>
</tbody>
</table>

9. If yes, indicate the type of degree

<table>
<thead>
<tr>
<th></th>
<th>Masters</th>
<th>Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

(Please indicate the field related to the degree)

<table>
<thead>
<tr>
<th></th>
<th>Construction</th>
<th>Engineering</th>
<th>Business</th>
<th>Law</th>
<th>Architecture</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14%</td>
<td>2%</td>
<td>43%</td>
<td>0%</td>
<td>1</td>
<td>0%</td>
</tr>
</tbody>
</table>

10. When do you plan to pursue this degree? within

<table>
<thead>
<tr>
<th>One Year</th>
<th>over 1 year but less than 2</th>
<th>over 2 years but less than 5</th>
<th>over 5 years</th>
<th>Undecided at this point</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
</tr>
</tbody>
</table>

11. What CMT subjects have been most helpful to you? Please list.

### 12. Specify the subjects you think should be added or taught in more detail within the CMT program?

<table>
<thead>
<tr>
<th>Subject</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduling</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Design</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Strength of Material</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Estimating</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>AutoCAD</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Management</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Drafting</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Scheduling</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

- **6%**: Yes, without reservations
- **11%**: Yes, with reservations
- **3%**: No, probably not
- **14%**: No, under no circumstances

### 13. Would you recommend the CMT program to an individual considering this curriculum?

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Yes without reservations</th>
<th>Yes with reservations</th>
<th>No, probably not</th>
<th>No under no circumstances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td>42%</td>
<td>50%</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### 14. What means have you utilized to seek employment?

<table>
<thead>
<tr>
<th>Means Used to Seek Employment</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td>50%</td>
<td>33%</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

### 15. Have you received employment (or an offer) at this point in time?

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Yes</th>
<th>No</th>
<th>Negotiating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Probability</td>
<td>38%</td>
<td>54%</td>
<td>1</td>
</tr>
</tbody>
</table>

### 16. What type of employment have you received, or would like to receive?

<table>
<thead>
<tr>
<th>Type of Employment</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>g</th>
<th>h</th>
<th>i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Probability</td>
<td>9%</td>
<td>4%</td>
<td>9%</td>
<td>13%</td>
<td>13%</td>
<td>4%</td>
<td>30%</td>
<td>9%</td>
<td>9%</td>
</tr>
</tbody>
</table>

### 17. Have you accepted an employment offer?

<table>
<thead>
<tr>
<th>Accepted</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Probability</td>
<td>42%</td>
<td>58%</td>
</tr>
</tbody>
</table>

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If the answer is yes, please give the name and address of the prospective employer.
- The Whiting-Turner Contracting Co.
- Fort Myer Construction Corp
- C. Waddell

### 18. Please feel free to make any additional comments relative to the CMT program which we can use in providing an improved quality of education. (curriculum, physical facilities, laboratory equipment, administration, faculty, etc.) You may use an additional sheet of paper if needed.

**Provide jobs for students in the department**

- Program Director making changes which is great for the advancement and knowledge on the CMT Program
- Fantastic program tedious at times, but the end result was well worth all the hardwork. All individuals involved in getting me to this point were all extremely helpful and well educated thus motivating me