

UMC meeting

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K. Richardson

School of Materials Science and Engineering,
Clemson University

ABET-related feedback requested from Beth Judson, NICE

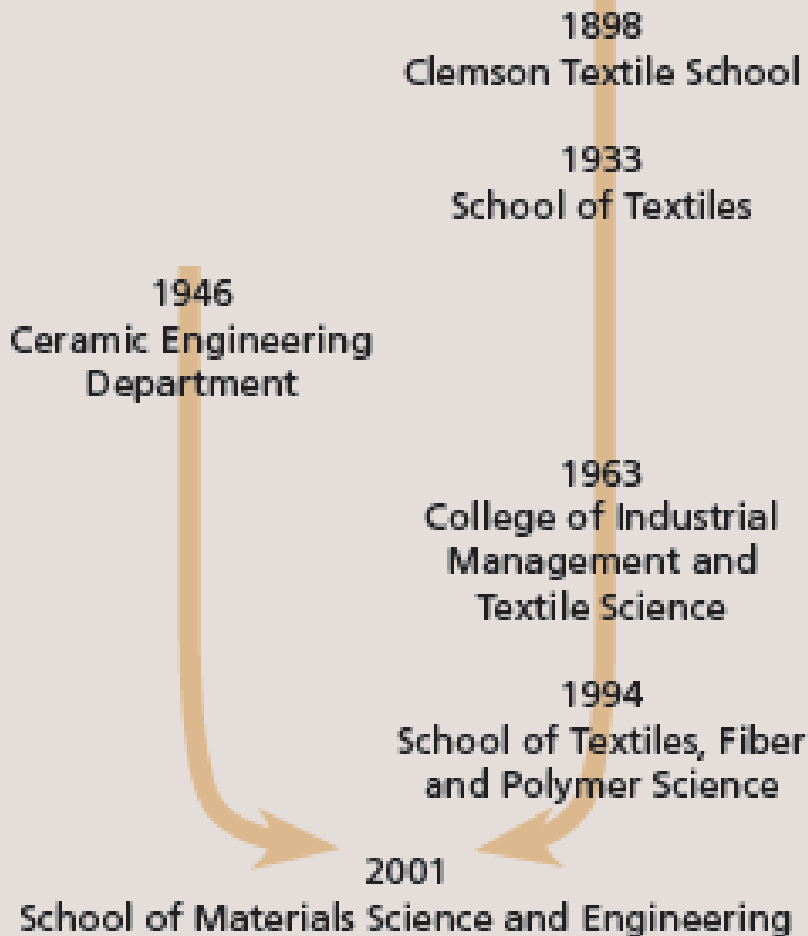
- **Dual Level Accreditation** – ABET’s policy & procedure manual Section II.B.8 states that a program may be accredited at only one level in a particular curriculum at a particular institution. A M.S. in Materials Engineering and a B.S. in Materials Engineering would not be allowed by ABET.
- ***Is this an opportunity for an institution to offer a B.S. in Materials Engineering and M.S. in Ceramic and/or Metallurgical Engineering?***
- The recent NAE report “Educating the Engineer of 2020: Adapting Engineering Education to the New Century” recommended that the baccalaureate degree should be recognized as the “pre-engineering” degree, and that ABET allow accreditation of engineering programs of the same name at the baccalaureate and graduate levels in the same department to recognize that education through a “professional” master’s degree produces an accredited “master” engineer.
- We have also heard that the civil engineers may shift accreditation to the master’s level as they feel the other required undergraduate coursework does not provide sufficient room for the coursework required by a civil engineer in their PE process.
- ***Do the program chairs feel there is a need for accreditation at the master’s level?***
- ***Do we want to support, or do we have a problem with dual level accreditation?***

Applied Science Accreditation

- ***Applied Science Program Accreditation –***
 - ***Is there any interest in exploring the possibility of accrediting “Materials Science” programs that do not contain the word engineering with ABET’s Applied Science Accreditation Commission?***
- (We are aware that UNC-Chapel Hill has a Materials Science (*only*) program, but don’t know of any others, is there a list somewhere?)
- It is notable that ASAC does allow programs to be accredited at more than one level in a particular curriculum at a particular institution. Currently ASAC accredits programs in: Health Physics, Industrial Hygiene, Industrial Management, Safety and Surveying.

Consolidation of Department-Clemson MS&E

School of Materials Science and Engineering Evolution



Key challenges

➤ ***Legacy issues***

Identity, industry base, type of funding realized, alumni base and their support

➤ ***Science versus Engineering***

Assessment, evaluation, ABET, management behavior at the College level

➤ ***Assimilation of expectation from students***

Independent versus group thinking, design experience, hands on experimental skills, qualifier exams and “base material science know-how”