1. Attendance:
   Aero – Not present (Jen-Ping Chen)
   AVN – Not present (Jerry Chubb)
   BME – Rita Alevriadou
   CHE – Dave Tomasko
   CEGS – (Civil, Environmental, Geomatics) – Chuck Moore
   CSE – Bruce Weide
   ECE – George Valco - Chair
   ENG PHY – Not present (Richard Hughes)
   FAB – Bob Gustafson (for Alfred Soboyejo)
   IWSE –
      ISE – Not present (Clark Mount-Campbell)
      WLD – Dave Farson
   MSE – Kathy Flores
   ME – Marcelo Dapino
   Graduate Student – Hannah Gustafson and Harry Pierson
   Undergraduate Student – Timothy Schroeder (not present Rebecca Murphy)
   Secretary – Ed McCaul
   Guests – Hazel Morrow-Jones

2. The Minutes from the 13 May 2008 meeting were approved as written.

3. The Committee Chair informed the committee that P. (Saday) Sadayappan told him that a revision of the Minor in Computational Science Proposal should be completed soon.

4. Bob Gustafson presented the revised Policy on Graduation with Distinction in Engineering for Undergraduates to the committee (attached). The policy has been revised based on feedback received the last time the committee reviewed the policy. The floor was opened for questions.
   4.1. George Valco made the comment that ECE will need to update its undergraduate handbook to be consistent with the college’s policy if the proposed policy is approved.
   4.2. The question was asked as to whether a student has to be an honors student to graduate with distinction. The response was that they must meet the honors qualifications.
   4.3. The question was asked as to whether it was possible for a student to have a 3.4 and not be an honors student. The reply was yes.
   4.4. The question was asked as to whether a non-honors student who meets the honors qualifications can graduate with distinction. The response was yes. However, if a student wanted to graduate with honors they needed to be an honors student and complete the tasks in their honors contract. A student who
is qualified to be an honors student can graduate with distinction without having completed an honors contract.

4.5. Marcelo Dapino made a motion that the Policy on Graduation with Distinction in Engineering for Undergraduates be approved. Dave Tomasko seconded the motion. A vote was taken: 11 approved, 0 opposed, and 0 abstentions. The motion passed.

5. Hazel Morrow-Jones briefed the committee on the draft Masters of Engineering Leadership Proposal (handout attached). Hazel wanted to let the committee know that the proposal is coming, get feedback from the committee on the proposal, and find out if anyone is willing to serve on a CCAA subcommittee this summer which would have the responsibility of reviewing the proposal. While it has been a two year project, sometime this summer the proposal should be completed to include all of its appendices. Besides the College of Engineering, the John Glenn School of Public Affairs, Fisher College of Business, and the Moritz College of Law will be offering courses in the program. A differential tuition fee will be part of the degree’s budget model as there will be expenses involved that will not be covered by normal tuition. The degree will consist of 54 credit hours with many of the courses being offered both in an on-campus and distance mode. Interest in the degree has already been expressed by individuals and corporations. The floor was opened for questions.

5.1. The question was raised as to how many students are expected to enter the program. The response was that 20 to 30 students are expected initially with a maximum limit of 50 per year. The limit of 50 is self imposed as more than 50 students will create the need for additional sections in the core courses.

5.2. The question was asked as to how engineering courses which are only offered on-campus can be part of the program. The response was that the courses must be offered in both an on-campus and a distance mode. Currently, the courses in both the Materials Joining and Automotive Systems Technical Tracks are offered in an on-campus and distance mode.

5.3. The question was asked as to what additional qualifications a prospective student must have other than an undergraduate engineering degree. The response was that they must meet OSU’s minimum graduate school requirements. In addition, some of the technical tracks may have additional requirements. The committee that created the degree wants to avoid requiring prospective students to take the GRE.

5.4. The question was asked as to whether a PE could substitute for the GRE. The response was that while that might be a possibility not all prospective students would have a PE.

5.5. The question was asked as to what the minimum enrollment would be for the program to be financially successful. The response was that this has not yet been determined. However, the program will have to pay for itself. Once the program has been approved adjustments may need to be made to what courses and technical tracks are offered.
5.6. The question was asked as to what will happen if a student is not interested in any of the technical tracks. The response was that the committee that created the program has been considering a personally designed technical track.

5.7. The question was asked as to how transfer credit will be dealt with. The response was that rules for transfer credit will need to be developed.

5.8. The question was asked as to what incentive departments will be given to create courses for this program for if departments are required to assume all of the risks many may not participate. The response was that there is a pool of money that will pay for the costs of developing courses for the program. In addition, the dean has been asked for a letter stating that he is willing to financially support the program.

5.9. More information was requested on the two new engineering courses, 767 and 801, that are going to be part of the program. The response was that both of these courses have been reviewed by the Core Committee with 801 being approved and 767 needing to be revised before the Core Committee will approve it. A concurrence has been received for 801 from Philosophy and concurrences have been requested for 767 from Communications and English.

5.10. The comment was made that it appears due to the small number of students that will be in the program that some of the courses will only be offered once a year. The response was that this is true and that the plan is to use cohorts as much as possible.

5.11. The question was asked as to whether consideration has been given to incorporating foreign language training. The response was that while this is a great idea it is doubtful how useful it would be considering that most students would be part time students.

5.12. The comment was made that the requirement of 54 credit hours is more than what is required by the graduate school. The response was that the program could not be done with less and has been distilled as much as possible.

5.13. There being no further questions Hazel asked the committee if anyone was willing to be on a subcommittee this summer to review the proposal. Hannah Gustafson volunteered.

6. George Valco was elected as the 2008-2009 Committee Chair by acclamation.

7. George Valco informed the committee that he has heard back from a few people concerning the proposed inclusion of recitations in ECE 300 and all have been positive. He asked everyone whose programs use ECE 300 who had not yet responded to do so as soon as possible.

8. There being no future business the meeting was adjourned at 1:17 PM.

C: College Faculty
CCAA File
POLICY ON GRADUATION WITH DISTINCTION IN ENGINEERING FOR UNDERGRADUATES
APPROVED BY CCAA????????

By completing an undergraduate research project with thesis, eligible students can graduate "With Distinction in their major". To be eligible to participate in the program a student must have a CPHR of at least 3.40 and expect to graduate in the next two years. They are also eligible to apply for research scholarship and internship support.

The necessary steps for graduating “with Distinction” are:

1. Identify a faculty member with whom they will do their UG research.
2. Submit, during or prior to the first quarter of research, a completed Application for Undergraduate Research Form (Available at http://www.eng.ohio-state.edu/currentstudents/pdf/URSapp.pdf). This includes both a project proposal and a letter of recommendation by the faculty advisor.
3. Complete at least 6, advisor approved, credit hours of independent study (H783 or equivalent) in support of the research project. (This requirement may be larger for some programs.)
4. Satisfactorily complete a one-hour oral defense of a draft thesis before a faculty committee of at least two faculty with graduate advising status one of whom is the faculty advisor. The exam must be completed no later than the seventh week of the quarter of graduation.
5. Submit the Final Honors Thesis to the Knowledge Bank no later than the eighth week of the quarter of graduation. The "Graduate School Guidelines for Preparing and Submitting Theses, Dissertations, and D.M.A. Documents" is to be used as a style guide (copies can be obtained from the Graduate School Office or Web page).
6. Have at least a 3.4 CPHR at the time of graduation.
Masters of Engineering Leadership (MEL)

*...Providing Engineering Leadership Skills for a Global Environment*

**What:** Post Baccalaureate Professional Degree in Engineering

**For Whom:**
- Engineers in business and industry
- Probably 5 to 10 years post BS
- Public or private sector employment
- May spend long periods with one organization or change more often
- May spend entire career in one subfield of engineering or move between subfields
- Those who want both leadership training and technical depth – they want to stay on the technical side of their organization but become leaders of project teams, be able to communicate to nontechnical audiences, and understand the role of their projects in their organizations.

**Why:** Part of College’s Performance plan in response to the NAE’s *Engineer of 2020* and its call for more professional skills in the engineering curriculum as well as to demand from industry and requests from students. Developed as an important part of the College’s land grant mission, for engineers who want to be able to respond to rapidly changing technical and global conditions and to accelerate their careers in industry or the public sector.

**Overarching Purpose:**

The MEL program will prepare professionals in engineering disciplines to effectively lead innovative and challenging technical projects within their organizations. The MEL’s integrated engineering and management curriculum is designed to provide technical leadership and critical thinking skills to allow the student to operate at the interface of engineering, technology, science, and business. A year-long practicum develops applied skills while at the same time creating an understanding of the relevance of individual projects to the larger context of both the organization and the global business environment. Graduates will be equipped to advance to technical leadership positions through the effective application of their technology, analytical, management and communication skills.

The MEL delivers the knowledge in the most flexible and effective ways for the convenience of the professional.

**Learning Objectives:**

Engineers who complete this curriculum will:
- be current in the latest engineering knowledge and related advances in their selected field
- be able to apply knowledge more effectively toward new innovations and directions
- recognize and address the impact and importance of globalization in their field
- know how to communicate technical material to both technical and nontechnical audiences
- be able to use the fundamentals of managerial accounting, including capital budgeting and net present value
- understand entrepreneurship, intrapreneurship and how to commercialize new products
- be trained to manage and lead technical teams in a global and international setting
- be able to lead technical teams and projects in the context of their enterprise’s overall strategic mission, whether in the public or private sector
- recognize the important aspects of business-government relations for their organizations

**Delivery:**

- 54 graduate credit hours,
• Full time or part time.
• Most technical track and core classes available in both on-campus and distance modes.
• Selected courses and special experiences will be offered through intense, short-term, on-campus delivery.
• Credits available for professional experience.

Curriculum Details (details are as currently proposed):

Professional skills (Core) (28 hours):
• Fisher College of Business courses (created for this degree):
  o FCOB 8xx Leadership and Organizational Behavior
  o FCOB 8xx Entrepreneurship for Engineers.
  o FCOB 8xx Accounting/Finance for Engineers.
  o FCOB 8xx Strategy Formulation and Implementation.
• John Glenn School of Public Affairs (existing courses)
  o PPM 810 Management in Public Agencies
  o PPM 795 The Business and Government Relationships
• Moritz College of Law (new course)
  o Law 6xx The Legal Framework Supporting the Advancement of Technical or Innovative Organizational Initiatives
• OSU College of Engineering (new courses currently in CoE process)
  o Eng 767 Technical Communication
  o Eng 801 Engineering Ethics
  o Special events and on-campus experiences, including orientation and graduation ceremonies

Integrative project:
• ISE 685 Lean Sigma Foundation (new course currently in CoE process)
• 6 hours of integrative project work connected to the student’s technical track (see below) including project development, management and assessment

Technical Track:
• 20 hours in a track of technical electives including work that integrates applied technical knowledge with the core modules. (Automotive Systems Engineering track draft available as an example)

Structure of degree program:
• Half time director with full time staff assistant
• Track co-ordinator for each technical track (acts as advisor to all students in track)
• Graduate Studies Committee made up of track co-ordinators, College distance education director and MEL director; new track process created; evaluation of all courses and tracks required.
• Industry advisory board.
• Differential tuition will be required and will be used to fund the additional costs of the program.

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1 Students may elect either this course or the Management in Public Agencies course in the Glenn School depending on whether they are focused on the public or private sector
2 Students may elect either this course or the Leadership and Organizational Behavior course in Fisher.
3 Possible one week intensive course in Washington, DC as a substitute [http://www.washcampus.edu/](http://www.washcampus.edu/)
Masters of Engineering Leadership: Core and Technical Tracks

*Additional tracks currently under discussion:
- Energy and Sustainability
- Infrastructure/Built Environment
- Interdisciplinary Systems
- Nuclear Power
- Custom tracks possible