

LEARNING, CURRICULUM & STUDENTS (LCS) COMMITTEE

Wednesday, March 26, 2025, 1:00-2:00 p.m.

Zoom

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|---|--|--------------------------|
| Associate Dean, Academic & Students | Suprakash Datta | <input type="checkbox"/> |
| Assistant Dean, Students | Mitch Burnie | <input type="checkbox"/> |
| Manager, Graduate Studies | Almey Tse-Soriano | <input type="checkbox"/> |
| Vice-Chair of Council (non-voting) | Eric Ruppert | <input type="checkbox"/> |
| Librarian | John Dupuis | <input type="checkbox"/> |
| Faculty Members (1/dept) | Cuiying Jian (MECH) | <input type="checkbox"/> |
| | TBD Alternate | |
| | Stephanie Gora (CIVL) | <input type="checkbox"/> |
| | Ahmed Eldyasti (alternate) | |
| | Shahin Kamali (EECS) | <input type="checkbox"/> |
| 2 Faculty Members at large | John Lam (alternate) | <input type="checkbox"/> |
| | Baoxin Hu (ESSE) | <input type="checkbox"/> |
| | Michael Bazzocchi (alternate) | |
| 3 Students (2 UG, 1 Grad) | Hossam Sadek (MECH) - LCS Chair | <input type="checkbox"/> |
| | TBD | <input type="checkbox"/> |
| Secretary to Committee (non-voting) | Behrouz Homam (Undergraduate) | <input type="checkbox"/> |
| | Radhey Patel (Undergraduate) | <input type="checkbox"/> |
| | Benjamin Brunson (Graduate) | <input type="checkbox"/> |
| Manager of Quality Assurance & Accreditation (non-voting) | Pam Edgecombe | <input type="checkbox"/> |
| Assistant Secretary (non-voting) | Parag Jain | <input type="checkbox"/> |
| | Frances Valerio - Regrets | <input type="checkbox"/> |
| Total # of Votes: 13 | Total # of Votes with assigned members: 12 | |

Guests: Michael Jenkin, Nima Tabatabaei

| AGENDA | | | | | |
|--------|----------------|------|-------------------------|--|---|
| Items | Person | Time | Topic | Goal | Documents to Review in Advance |
| 1. | Michael Jenkin | 25 | Mechatronics Curriculum | Action: Review and Approve TRON Course Proposals: <ol style="list-style-type: none"> 1. LE/TRON 1000 4.00 New Course- Mechatronics Systems Design and Implementation I 2. LE/TRON 2000 4.00 New Course – Mechatronics System Design and Implementation II 3. LE/TRON 3000 4.00 New Course – Mechatronics System Design and Implementation III 4. LE/TECL 1999 0.00 New Course - Leadership & Teamwork I 5. LE/TECL 2999 0.00 New Course - Leadership & Teamwork II | Attached Pg. 6 Pg. 21 Pg. 36 Pg. 50 Pg. 59 |

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|----|-----------------|----|-----------------|---|----------|
| | | | | <p>6. LE/TECL 3999 0.00 New Course - Leadership & Teamwork III Pg. 68</p> <p>7. LE/TECL 4999 0.00 New Course - Leadership & Teamwork IV Pg. 77</p> <p>8. LE/TECL 2910 0.00 New Course - Mechatronics Work-Term I Pg. 86</p> <p>9. LE/TECL 3910 0.00 New Course - Mechatronics Work-Term II Pg. 97</p> <p>10. LE/TRON 3001 4.00 New Course – (Cross listed with ESSE 3380) Introduction to Mechatronics Pg.</p> <p>11. LE/TRON 4001 4.00 New Course – (Cross listed with ESSE 4380) Mechatronics Systems and Design</p> | |
| 2. | Nima Tabatabaei | 30 | MSES Curriculum | <p>Action: Review & Approve Master of Engineering in Sustainable Energy Systems (MSES) Courses:</p> <p>The following are NEW courses created specifically for the MSES program:</p> <p>1. GS/ENG 6003 0.00 New Course - Professional Engineering Ethics and Conduct Pg. 126</p> <p>2. GS/ENG 6511 3.00 New Course - Technology Commercialization and Engineering Management Pg. 135</p> <p>3. GS/ENG 6512 3.00 New Course - Fundamentals of Engineering Project Management Pg. 145</p> <p>4. GS/MSES 6108 3.00 New Course - Computational Methods for Sustainability Assessment of Energy Systems Pg. 156</p> <p>5. GS/MSES 6109 3.00 New Course – Two-Phase Flow and Heat Transfer Pg. 166</p> <p>6. GS/MSES 6407 3.00 New Course - Materials for Energy Applications Pg. 176</p> <p>7. GS/MSES 6408 3.00 New Course - Additive Manufacturing for Sustainability Pg. 186</p> <p>8. GS/MSES 6509 3.00 New Course - Technoeconomic and Life Cycle Pg. 196</p> <p>The following courses are drawn from existing courses but with minor changes to some of the CLOs and assessments:</p> <p>9. GS/MSES 6103 3.00 New Course - Convective Heat Transfer Pg. 206</p> <p>10. GS/MSES 6104 3.00 New Course - Advanced Heat Transfer Pg. 216</p> <p>11. GS/MSES 6105 3.00 New Course - Advanced Fluid Dynamics Pg. 226</p> | Attached |

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| | | | | <p>12. GS/MSES 6106 3.00 New Course - Radiation Heat Transfer with Applications in Energy, Building Systems, and Sustainability</p> <p>13. GS/MSES 6507 3.00 New Course - Sustainable Energy Systems Technologies, Transitions, and Global Perspectives</p> | <p>Pg. 237</p> <p>Pg. 250</p> |
| 3. | Hossam Sadek | 5 | Other Business | | |

Future Agenda Items:

1. **ESSE Proposals:**
 - 1.1. [GS/ESS 5103 2.00 New Course \(pending Dept approval\)](#)
2. **EECS CSSD Course Changes**
 - 2.1. [LE/CSSD 2211 3.00 Course Changes \(pending Dept approval\)](#)
 - 2.2. [LE/CSSD 2221 3.00 Course Changes \(pending Dept approval\)](#)
3. **EECS Graduate Program Proposals:**
 - 3.1. [GS/EECS 6467 3.00 New Course \(pending EECS Grad approval\)](#)
4. GS/MECH 6504 3.00 Course Changes
5. Professional Masters in Space Systems – Earth and Space Science and Engineering Department (F2025)
6. Professional Masters in Humanitarian Engineering - Not tied to a department (F2025)
7. Professional Masters in Digital Twins for Built Environment – Earth and Space Science and Engineering Department (WI2026)
8. M.Eng. in Electrical, Computer and Software Engineering – theme “Intelligent Systems” – Electrical Engineering and Computer Science Department (WI2026)