### New Course Proposal Form

1. **Will this new course affect a current program?**
   - Yes [ ]
   - No [ ]

2. **Teaching Department:**
   - Computer Science

3. **Administering Faculty/Unit:**
   - Science

4. **Campus**
   - Downtown

5. **Effective Term of Implementation**
   - Term: Jan. 2005

6. **Course Title (Limit 30 Characters) - required for all courses:**
   - Intro Robots & Intelligent Systems

7. **Course Number(s)**
   - Subject/course number: COMP 417
   - Course(s) Span:
     - 1 term
     - 2 consecutive terms (D1, D2)
     - 2 non-consecutive terms (N1, N2)
     - 3 terms (J1, J2, J3)

8. **Course Title to Appear in the Calendar (optional)**
   - Limit 59 characters:
   - Introduction to Robotics and Intelligent Systems

9. **Credit Weight**
   - 3

10. **Schedule Type(s):**
    - (Enter all that apply – see form, STVSCHD in Banner for a complete list.)
    - (i.e. Lecture, Labs, Tutorial)
    - Hours per Week
      - [ ] 3
      - [ ] 0
      - [ ] 0

    - Total Hours per Week: 3

11. **Projected Enrollment:**
    - 35
12. Prerequisite(s) (Courses or Tests)
Specify course number(s) or name(s) of test(s):

- COMP-424
- MATH-223

If the student does not have a prerequisite should web registration be blocked?
- Yes ☐ No ☑

If "Yes" complete A and B:
A. Indicate minimum grade or test score(s) the student must attain in prerequisite course(s) or test(s):

B. Can the prerequisite course(s) or test(s) be taken in the same term as this course?
- Yes ☐ No ☑

13. Corequisite(s) Course Number(s):
Specify course number(s) and title(s):

If the student does not register for the corequisite in the same term should web registration be blocked?
- Yes ☐ No ☑

14. Consultation Reports Attached
- Yes ☑ No ☐

15. Additional Course Charges (must be approved by the Fee Policy Committee)
Description of Fee
(e.g. screening fee)  |  Amount
---|---

16. Requires Teaching, Physical, or Financial Resources
Not Currently Available (attach explanation)
- Yes ☐ No ☑

17. Other Information (specify):

18. Course Description
(as it will appear in the Calendar [maximum 50 words]):
(N.B. Faculty of Medicine must append complete course outline)

19. Supplementary information to appear in the Calendar in addition to the course description. Such as: registration restriction(s), prerequisite(s), corequisite(s), equivalent course(s), contact hours, enrolment limitations, language of instruction etc.
Please enter the information as it should appear in the calendar notes.

20. Rationale
Robotics and more generally the integration of hardware systems with computer software represent a key area of both industrial and research significance. There is a widely held belief that robotics technologies will become increasingly available in the next several years, for example via semi-automated vehicle controls. The area also has appealing connections to both theoretical computer science as well as computer systems engineering. The area has wide appeal and is an area of exceptional research strength at McGill, and yet it is it is not currently represented in our undergraduate program. This course would address that shortcoming.

There are two robotics courses at the 500-level in mechanical engineering: MECH 572, Introduction to Robotics and MECH 573, Mechanics of Robotic Systems and one course in mechatronics MECH 557, Mechatronic Design, but none of these focuses on algorithmic issues or has a syllabus that substantially overlaps with what is proposed here.
### INFORMATION FOR ADMISSIONS, RECRUITMENT & REGISTRAR'S OFFICE

**To be completed by the Faculty**
- Slot Course: [ ] Yes [ ] No
- Thesis Component: [ ] Yes [ ] No

**To be completed by ARR**
- CIP Code: 

**For Continuing Education Use**
- CE Admin. Unit: 
- CE Non-Grant Courses: 
- Flat Rate: CdnFlat Rate: [ ] Yes [ ] N/A

### 21. Approvals:

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<tr>
<th>Routing Sequence</th>
<th>Departmental Meeting</th>
<th>Departmental Chair</th>
<th>Other Faculty</th>
<th>Curric/Academic Committee</th>
<th>Faculty</th>
<th>SCTP</th>
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<tbody>
<tr>
<td>Name</td>
<td>Denis Thérien</td>
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**Departmental Contact Person**
- Judy Kenigsberg, ext. 00895

*New Course Proposal Form C1-3*