

**APPROVED BY SENATE**  
**12/06/2021**

# 10KS0112MCS & 10KS0112MCSU: COMPUTER SCIENCE, MCS (ON-CAMPUS & ONLINE)

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## In Workflow

1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu; mhazen@illinois.edu)
2. 1434 Head (namato@illinois.edu; vmahesh@illinois.edu; egunter@illinois.edu)
3. KP Committee Chair (bsnewell@illinois.edu; kcp@illinois.edu; jmakela@illinois.edu; amccul2@illinois.edu; bodony@illinois.edu)
4. KP Dean (candyd@illinois.edu)
5. University Librarian (jpwilkin@illinois.edu)
6. Grad\_College (agrindly@illinois.edu; lowry@illinois.edu)
7. Provost (kmartens@illinois.edu; mhazen@illinois.edu)
8. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
9. Senate (jtempel@illinois.edu)
10. U Senate Conf (none)
11. Board of Trustees (none)
12. IBHE (none)
13. HLC (kmartens@illinois.edu)
14. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

## Approval Path

1. Mon, 11 Oct 2021 16:04:00 GMT  
Deb Forgacs (dforgacs): Approved for U Program Review
2. Mon, 11 Oct 2021 16:49:01 GMT  
Elsa Gunter (egunter): Approved for 1434 Head
3. Tue, 19 Oct 2021 19:00:07 GMT  
Keri Pipkins (kcp): Approved for KP Committee Chair
4. Tue, 19 Oct 2021 19:44:59 GMT  
Candy Deaville (candyd): Approved for KP Dean
5. Tue, 19 Oct 2021 20:48:49 GMT  
John Wilkin (jpwilkin): Approved for University Librarian
6. Wed, 10 Nov 2021 20:45:58 GMT  
Allison McKinney (agrindly): Approved for Grad\_College
7. Wed, 10 Nov 2021 21:15:08 GMT  
Kathy Martensen (kmartens): Approved for Provost

## History

1. Apr 22, 2019 by Deb Forgacs (dforgacs)
2. Jan 16, 2020 by Mary Lowry (lowry)
3. Jan 27, 2020 by Deb Forgacs (dforgacs)

Date Submitted: Mon, 11 Oct 2021 08:01:58 GMT

## Viewing: 10KS0112MCS & 10KS0112MCSU : Computer Science, MCS (on-campus & online)

Changes proposed by: Viveka Kudaligama

### Proposal Type:

Major (ex. Special Education)

### This proposal is for a:

Revision

## Administration Details

### Official Program Name

Computer Science, MCS (on-campus & online)

### Sponsor College

Grainger College of Engineering

### Sponsor Department

Computer Science

### Sponsor Name

Robin Kravets

### Sponsor Email

rhk@illinois.edu

### College Contact

Keri Carter Pipkins

### College Contact Email

kcp@illinois.edu

### College Budget Officer

Tessa Hile

### College Budget Officer Email

tmhile@illinois.edu

**List the role for rollbacks (which role will edit the proposal on questions from EPC, e.g., Dept Head or Initiator) and/or any additional stakeholders. Purpose: List here who will do the editing work if proposal needs rolled back. And any other stakeholders.**

Rollback to Viveka Kudaligama (initiator); Other stakeholders: Mahesh Viswanathan (Assoc. Head for Academics), Elsa Gunter (Director of Undergraduate Programs)

**Does this program have inter-departmental administration?**

No

## Proposal Title

### Effective Catalog Term

Spring 2022

### Provide a brief, concise description (not justification) of your proposal.

These revisions are to:

- (i) incorporate internship opportunities for Master of Computer Science (MCS) students, and
- (ii) add a Chicago, Illinois, location as a new approved location for the MCS program.

## Program Justification

### Why are these changes necessary?

(i) The majority of Master of Computer Science (MCS) students hold an external internship during their academic program, which provides them valuable (industry) workplace experience to complement the knowledge and skills gained in the classroom. Such internship experiences are integral to preparing the Master's level students for competitive careers upon graduation. The proposed revisions first recognize the value of the internship experiences in the overall educational experience through inclusion of a credit-bearing practicum course, comparable work experience, or other elective course as a required degree requirement.

(ii) The second revision to add an MCS program delivered in Chicago, Illinois--addresses an unmet demand. The department has experienced a steady increase in the demand for our on-campus MCS program -- over the past 5 years applications have more than doubled from about 750 for 2017-2018 to 1500 for 2021-2022. Given the physical capacity issues on campus, we have only been able to admit an average of about 15% of the applicants and have had to decline hundreds of qualified applicants. Hence, there is a significant unmet demand in the in-person on-campus program. While the online MCS program offered on an online platform has helped alleviate some of this unmet demand, there is a segment of applicants who wish to continue their graduate studies in an in-person environment. Offering the MCS program in-person in Chicago can provide these prospective students an opportunity for graduate studies. In addition, considering the tech industry employment prospects in Chicago and the surrounding suburbs, a program offered in Chicago will provide graduate training for the workforce in the greater Chicago area and thus support the State of Illinois economy. Offering the program in Chicago will also help increase the diversity of our student population in Computer Science. This revision will also benefit MCS students from the Urbana campus who will have restricted access to the courses offered at the Chicago location and enhanced opportunities to explore internships and other professional development opportunities in Chicago through participation in the activities at the Chicago location.

The department requests a new program code for the Chicago location.

## Instructional Resources

**Will there be any reduction in other course offerings, programs or concentrations by your department as a result of this new program/proposed change?**

No

**Does the program include other courses/subjects impacted by the creation/revision of this program?**

No

## Program Regulation and Assessment

Briefly describe the plan to assess and improve student learning, including the program's learning objectives; when, how, and where these learning objectives will be assessed; what metrics will be used to signify student's achievement of the stated learning objectives; and the process to ensure assessment results are used to improve student learning. (Describe how the program is aligned with or meets licensure, certification, and/or entitlement requirements, if applicable).

[No changes to current program regulation and assessment.]

Is the career/profession for graduates of this program regulated by the State of Illinois?

No

## Program of Study

"Baccalaureate degree requires at least 120 semester credit hours or 180 quarter credit hours and at least 40 semester credit hours (60 quarter credit hours) in upper division courses" (source: <https://www.ibhe.org/assets/files/PrivateAdminRules2017.pdf>). For proposals for new bachelor's degrees, if this minimum is not explicitly met by specifically-required 300- and/or 400-level courses, please provide information on how the upper-division hours requirement will be satisfied.

All proposals must attach the new or revised version of the Academic Catalog program of study entry. Contact your college office if you have questions.

Attach a side-by-side comparison with the existing program AND, if the revision references or adds "chose-from" lists of courses students can select from to fulfill requirements, a listing of these courses, including the course rubric, number, title, and number of credit hours.

Catalog Page Text - Overview Tab

Text for Overview tab on the Catalog Page. This is not official content, it is used to help build the new catalog page for the program. Can be edited in the catalog by the college or department.

[No changes are being requested to the current Overview tab on the Catalog Page.]

### Statement for Programs of Study Catalog

**This degree program can be completed either on campus or online; the requirements are listed below:**

Code	Title	Hours
	Breadth Requirement ( <a href="http://cs.illinois.edu/academics/graduate/professional-mcs-program/mcs-degree-requirements/">http://cs.illinois.edu/academics/graduate/professional-mcs-program/mcs-degree-requirements/</a> )	12-16
	Advanced courses – chosen from CS 500- CS 590 and CS 598; CS 597, or an approved non-CS 500-level course may satisfy 4 credit hours of this requirement.	12
	Select one of the following -CS 591 Prof. Development (or comparable work experience in CS); or ENG 572 Professional Practicum (CS); or Elective course (subject to Other Requirements and Conditions)	0-4
	Elective courses (subject to Other Requirements and Conditions below)	0-8
	Total Hours	32

## Other Requirements and Conditions

### Requirement

Other Requirements and Conditions may overlap

A minimum of 24 CS credit hours must be taken from the University of Illinois at Urbana-Champaign campus.

A minimum of 12 500-level credit hours overall.

A maximum of 4 hours of CS 591 and CS 491 may be applied toward the degree.

A grade of B- or higher is required for Breadth course work.

At most, 12 semester credit hours of previous graduate course work may be transferred and applied to the M.C.S. degree requirements and 12 credit hours of non-degree graduate courses completed in the Department of Computer Science at the University of Illinois at Urbana-Champaign campus may be transferred and applied to the M.C.S. degree requirements.

All degree requirements must be completed within three consecutive semesters (only fall and spring semesters are counted).

Off-campus students have 5 years in which to complete this degree.

The minimum program GPA is 3.0.

### Corresponding Degree

MCS Master of Computer Science

## Program Features

### Academic Level

Graduate

### Does this major have transcribed concentrations?

No

### What is the typical time to completion of this program?

5

### What are the minimum Total Credit Hours required for this program?

32

### What is the required GPA?

3.0

### CIP Code

110701 - Computer Science.

### Is This a Teacher Certification Program?

No

**Will specialized accreditation be sought for this program?**

No

## **Delivery Method**

**This program is available:**

On Campus and Online - 2 program types. Students can receive the entire program either on campus or online. Students can choose to take courses in either modality.

**Describe the use of this delivery method:**

Students in the online program receive the entire program on the online platform.

Currently, the on-campus program is only offered to students on the Urbana campus. These students have access to the courses taught on the Urbana campus and restricted access to courses on the online platform.

The proposed revision will add a new location in Chicago, Illinois, for the on-campus delivery of the program. Students at the new location will have access to the courses taught at the Chicago location, restricted access to courses on the online platform, and will also have the opportunity to take some courses on the Urbana campus if they wish. Students at the Urbana Campus will have restricted access to the courses taught in the new location, subject to availability.

## **Admission Requirements**

**Desired Effective Admissions Term**

Spring 2022

**Provide a brief narrative description of the admission requirements for this program. Where relevant, include information about licensure requirements, student background checks, GRE and TOEFL scores, and admission requirements for transfer students.**

The admissions requirements for the proposed new location in Chicago will be the same as for the Urbana campus program. International students who do not meet the language requirements at the Graduate College must provide appropriate test scores (currently from TOEFL, IELTS, or Duolingo). Application material includes transcripts, a personal statement, and letters of recommendation.

**Describe how critical academic functions such as admissions and student advising are managed.**

The admissions process will continue to be located at the Urbana campus, under the direction of the CS Graduate Admissions Committee. Course and enrollment management will also be coordinated through the graduate academic office on the Urbana campus.

Academic advising support for students taking classes in the new location will be provided by a new member of the department's Graduate Programs Office. This new graduate academic advisor will be located in Chicago, with remote support from the academic advisors on the Urbana campus.

The department graduate advisors successfully support our online programs virtually, and during the pandemic, have successfully integrated virtual advising for much of our on-campus advising needs.

The program will also be supported by faculty and TAs located in Chicago.

The CS department will plan for regular in-person activities for the Chicago students for community building and professional development. Students on the Urbana campus may also participate in them subject to resource availability.

Students on the Chicago location will receive career services support from the Urbana campus. Chicago students will have access to the in-person career fairs and other events in Urbana. Transportation options for these students can include the university bus services, in addition to other public and private transportation modes.

## Enrollment

### Describe how this revision will impact enrollment and degrees awarded.

The Chicago location will increase enrollment in the on-campus MCS program and the number of degrees awarded.

Currently, matriculation is Fall term only for the Urbana campus and Fall, Spring, and Summer for the online program. Proposed revision to support admission in Fall, Spring and Summer for all MCS programs.

Estimated numbers of degrees awarded for the proposed Chicago location:

Year One Estimate: 20

5th Year Estimate (or when fully implemented): 60

### Estimated Annual Number of Degrees Awarded

### What is the matriculation term for this program?

Fall

## Budget

### Are there budgetary implications for this revision?

Yes

### Please describe the budgetary implications for this revision, addressing applicable personnel, facilities, technology and supply costs.

One program coordinator/advisor staff member will be hired for the Chicago program.

### Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?

Yes

### Please explain/describe:

No additional faculty will be needed to support the program. One program coordinator/advisor staff member will be hired for the Chicago program.

### Additional Budget Information

The estimated cost for the staff member is \$70,000 a year.

## Financial Resources

### How does the unit intend to financially support this proposal?

The program will be supported by tuition revenue.

### Will the unit need to seek campus or other external resources?

No

**What tuition rate do you expect to charge for this program? e.g, Undergraduate Base Tuition, or Engineering Differential, or Social Work Online (no dollar amounts necessary)**

The tuition rate will be the same as for the MCS program on the Urbana Campus.

**Are you seeking a change in the tuition rate or differential for this program?**

No

**Is this program requesting self-supporting status?**

No

## **Resource Implications**

### **Facilities**

**Will the program require new or additional facilities or significant improvements to already existing facilities?**

No

### **Technology**

**Will the program need additional technology beyond what is currently available for the unit?**

No

### **Non-Technical Resources**

**Will the program require additional supplies, services or equipment (non-technical)?**

No

### **Resources**

**For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/ acknowledgement from faculty, students, and/or other impacted units as appropriate.**

**Attach File(s)**

MCS Curriculum Revisions\_FA21.pdf

MCS\_Chicago\_ResourceImplications.pdf

## Faculty Resources

**Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.**

Newly listed courses in the Programs of Study catalog will become part of regular teaching schedules for current faculty.

Teaching load for the Chicago location will be part of the regular teaching schedule for current faculty. Class size in the 400- and 500-level courses will not be affected.

Academic advising support for students taking classes in the new location will be provided by a new graduate academic advisor located in Chicago. The program will be supported by faculty and TAs located in Chicago.

Students on the Chicago location will receive career services support from the Urbana campus. Chicago students will have access to the in-person career fairs and other events in Urbana. Transportation options for these students can include the university bus services, in addition to other public and private transportation modes.

## Library Resources

**Describe your proposal's impact on the University Library's resources, collections, and services. If necessary please consult with the appropriate disciplinary specialist within the University Library.**

No impact anticipated.

## EP Documentation

### EP Control Number

EP:22.051

### Attach Rollback/Approval Notices

CS responses to Ed Pol regarding MCS in Chicago.pdf  
Updated\_Ed Pol Comments on MCS Proposal.pdf  
Letter of Support for Chicago MCS from DPI.pdf  
GCOE Communications with UIC regarding Chicago MCS.pdf

### This proposal requires HLC inquiry

No

## DMI Documentation

### Attach Final Approval Notices

UIUC RME MCS in Region 10 11-04-2021.pdf

### Banner/Codebook Name

MCS:Computer Science -UIUC

**Program Code:**

10KS0112MCS & 10KS0112MCSU

**Degree Code**

MCS

**Major Code**

0112

**Program Reviewer Comments**

**Deb Forgacs (dforgacs) (Mon, 27 Sep 2021 16:24:00 GMT):**Re-entered the proposal type, the corresponding program and the CIP code due to system bug 09/27/2021

**Keri Pipkins (kcp) (Thu, 07 Oct 2021 20:08:38 GMT):**Rollback: Rollback to add MCS in Chicago option

Key: 183

Office of the Executive Vice President/Vice President for Academic Affairs  
377 Henry Administration Building  
506 South Wright Street  
Urbana, IL 61801

Julian Parrott

*Assistant Vice President for Academic Programs and Partnerships*

November 4, 2021

Gretchen Lohman  
Illinois Board of Higher Education  
1 N. Old State Capitol Plaza, Suite 333  
Springfield, IL 62701

Dear Dr. Lohman:

I write to request of the IBHE a Reasonable and Moderate Extension (RME) to offer the University of Illinois Urbana-Champaign's Master of Computer Science in Computer Science program in Region 10 (Chicago). This request is made under RME definition 18, creation of an out-of-region degree program. It is currently approved for offering in Region 7 (Prairie Region). The program will be offered at UIUC's Illini Center, 200 South Wacker Drive, Chicago.

The program's CIP code is 11.0701, Computer Science.

The Department of Computer Science in the Grainger College of Engineering has experienced a steady increase in the demand for the on-campus Master of Computer Science in Computer Science (MCS) program; over the past five years, applications have more than doubled from about 750 for 2017-2018 to 1500 for 2021-2022. Given the physical capacity issues on campus, the department has only been able to admit an average of about 15% of the applicants and has had to decline hundreds of qualified applicants. Hence, there is a significant unmet demand in the in-person program at the Urbana-Champaign campus. While the online MCS program has helped alleviate some of this unmet demand, there is a segment of applicants who wish to continue their graduate studies in an in-person environment. Offering the MCS program in-person at Chicago can provide these prospective students an opportunity for graduate studies. In addition, considering the tech industry employment prospects in Chicago and the surrounding suburbs, a program offered in Chicago will provide graduate training for the workforce in the greater Chicago area and thus support the state of Illinois' economy. Offering the program at Chicago will help increase the diversity of the department's student population. The proposed new location will also benefit MCS students from the Urbana-Champaign campus who will have restricted access to the courses offered at the Chicago location and enhanced opportunities to explore internships and other professional development opportunities in Chicago through participation in the activities at the Chicago location.

The admission requirements for the proposed Chicago location will be the same as for the Urbana-Champaign-based program. The process will continue to be located at the Urbana-Champaign campus, under the direction of the Computer Science Graduate Admissions Committee. Course and enrollment management will be coordinated through the Graduate Academic Office at the Urbana-Champaign campus.

The curriculum for the MCS at Chicago will be exactly the same as the curriculum for the existing MCS at Urbana-Champaign, same faculty qualifications and instructional technology. The proposed new location at Chicago will offer in-person delivery of the program. Students at the new location will have access to the courses taught at the Chicago location, restricted access to courses of the online platform, and the opportunity to take some courses at the Urbana-Champaign campus if they wish. Students at the Urbana-Champaign campus will have restricted access to the courses taught at the new location, subject to availability.

No additional faculty hires will be needed for the proposed new location. Faculty and TAs who teach in the program will be located at Chicago. Teaching load for the Chicago location will be part of the regular teaching schedule for these current faculty. Class size in the 400- and 500-level courses will not be affected.

Academic advising support for students taking classes at the new location will be provided by a new graduate academic advisor located at Chicago. This hire will be funded by the Department of Computer Science.

Students at the Chicago location will receive career services support from the Urbana-Champaign campus. Chicago students will have access to the in-person career fairs and other events at Urbana-Champaign. Transportation options for these students can include the university bus services, in addition to other public and private transportation modes.

There is no anticipated impact on University Library resources or on any Urbana-Champaign facilities, technology, or resources.

Academic advising support for students taking classes at the new location will be provided by a new member of the department's Graduate Programs Office. This new graduate academic advisor will be located at Chicago, with remote support from the academic advisors at the Urbana-Champaign campus. The department graduate advisors successfully support our online programs virtually, and during the pandemic, successfully integrated virtual advising for much of our on-campus advising needs.

The Department of Computer Science will plan for regular in-person activities for the Chicago students for community building and professional development. Students at the Urbana-Champaign campus may also participate in them, subject to resource availability.

Thank you for your consideration of this request. If you have questions, please do not hesitate to contact Kathy Johnson or me.

Sincerely,



Julian Parrott, Ed.D.

Assistant Vice President for Academic Programs & Partnerships

C: Emily Chase	Kathy Martensen
Amy Edwards	Jessica Mette
Ellen Foran	Renee Nagy
Avijit Ghosh	Emily Stuby
Kathy Johnson	Nathan Wilds
Kristi Kuntz	Aubrie Williams
Chris Lehman	

## **MCS – Proposal for Chicago location**

### **Resource Implications: Addendum**

The proposed Chicago program will be housed in the DPI/Illini Center space in Chicago, which also hosts the City Scholars program. The facility includes classrooms (capacity of 60), common spaces for students to study, and offices for faculty and staff. The DPI staff will also support events for students, such as tech talks, career networking events, etc.

**Revisions to Master of Computer Science (MCS) program, Fall 2021**

**Key**  
**GREEN HIGHLIGHT** = Updates to coursework specification or hours

Current Requirement	Current Hours	Revised Requirements	Revised Hours
Breadth Requirement	12-16	Breadth Requirement	12-16
Advanced courses – chosen from CS 500 - CS 590 and CS 598; CS 597, or an approved non-CS 500-level course may satisfy 4 credit hours of this requirement.	12	Advanced courses – chosen from CS 500 - CS 590 and CS 598; CS 597, or an approved non-CS 500-level course may satisfy 4 credit hours of this requirement.	12
		Select one of the following - CS 591 Prof. Development (or comparable work experience in CS); or ENG 572 Professional Practicum (CS); or Elective course (subject to Other Requirements and Conditions)	0-4
Elective courses (subject to Other Requirements and Conditions below)	4-8	Elective courses (subject to Other Requirements and Conditions below)	0-8
<b>Total Hours</b>	<b>32</b>	<b>Total Hours</b>	<b>32</b>

**Courses newly listed in revisions**

CS 591 Prof. Development - 1 hour

ENG 572 Professional Practicum (CS) - 1 hour

# MCS in Chicago - Ed Pol Questions & Responses

MCS Revisions: Chicago program (EP.22.051)

## Ed Pol Committee Questions

1. When are you expecting the first Chicago cohort to apply to the program? When do you expect them to start taking classes?

The department expects students will formally apply to the Chicago cohort with the first application cycle after the program revision is approved, likely in Spring 2023. We may offer Chicago as an option to students matriculating in Fall 2022, pending approval from campus.

2. What can you add regarding the implementation of the program in Chicago? Do you know where classes will be held and when? It is not the committee's place to tell you how to run your program. But, I think people want to have some confidence that the infrastructure is in place to deliver a program of similar quality to the Urbana-based one.

The program will be held in the Discovery Partners Institute (DPI) space at 200 S. Wacker Drive, which is the same building that houses the Illini Center. The College of Engineering's City Scholars Program is also currently housed in DPI space, which is a program in which juniors and seniors majoring in CS, CS+X, CE, and EE, are placed in internships with companies in Chicago and also take 200-400 level CS and ECE courses online or offered in person at the DPI space in Chicago. The MCS program in Chicago is synergistic with the City Scholars program in that the MCS program will utilize the same classroom space in the DPI that the City Scholars program does, and in many cases, also actually the same courses. In particular, the MCS students will also be able to take the 400-level courses already offered for City Scholars students, and the City Scholars students will also benefit as they will have a greater selection of courses to choose from as we teach more 400-level courses in Chicago. The current number of students in the City Scholars program and the number of students planned for the MCS in Chicago are such that we believe that we will have the capacity to meet the demand for all Chicago-based students in our courses taught there. Students in the MCS program in Chicago will also have access to the courses taught in our online MCS, providing them additional options and ensuring they have a pathway towards timely completion of the degree. The DPI administration has committed to continue providing us access to the classroom space in the DPI for our programs, and is committed to maintaining that support when the DPI moves to the new building on The 78.

3. What communication has there been with UIC? My understanding from Linda Moorhouse is that Dean Bashir has discussed this with Dean Nelson at UIC, and he is supportive of the program and interested in exploring collaboration. If you could get a short letter/email/note from Dean Nelson to this effect that could be added to the proposal, I think it would greatly help speed/smooth the approval process.

In addition to Dean Bashir's discussions with Dean Nelson at UIC, CS Dept. Head Prof. Nancy Amato has spoken with Prof. Bob Sloan, the UIC CS Department Head. UIC does not actually have a professional masters program in Computer Science. They do have an MS program with options for a thesis (similar to

the MS program in Urbana) and for a coursework only option (similar to the MCS program in Urbana). Since the UIC CS faculty prefer the applicants in the thesis option, they end up declining many of the coursework only MS applicants. So, in this sense, we would be providing an option that fulfills a demand for students interested in a coursework only masters degree in Chicago that UIC is not currently able to meet.

4. Is there any concern that the Chicago offering may actually prove more popular than the Urbana one and cannibalize it reducing its overall quality (take the best instructors, students, etc.)?

The CS Department does not anticipate that offering the professional Masters program in Chicago will negatively impact the Urbana location. First, the anticipated size of the MCS in Chicago is modest, starting with 20 and growing over 4-5 years to 60, which is approximately 25% of the size of our on campus MCS program in Urbana which currently has about 225 students. Hence, given the large unmet demand for this program (the acceptance rate is only about 15% currently), we anticipate no problem in maintaining the high quality of this program even when offered in both locations. Regarding faculty, although Chicago may be a draw for some, most faculty in the department have strong professional and personal roots in Urbana-Champaign. We expect the large majority of department faculty to remain in Urbana-Champaign, and so with them, their students. While we feel that the Chicago location has a place in our department research and educational programs, the resources in Urbana-Champaign, including office/lab space, equipment, collaboration with colleagues across campus, cost of living, etc., simply cannot be replicated in Chicago. The fact that most faculty and students will be in Urbana-Champaign will in turn mean that most of our academic programs will continue to be housed in Urbana-Champaign.

5. This is a question that has arisen in the past for programs such as these. I haven't heard it yet for this one, but it may be helpful for you to be prepared. There have been concerns raised by Senators in the past that programs like this can force faculty to teach out of town, making their jobs harder. How will faculty be induced to teach in this program? (I suspect that many of your faculty view the chance to teach in Chicago as a positive, not a negative).

Currently there are no plans to offer incentives or to force faculty to teach in Chicago. We have found significant interest from our faculty in teaching in the City Scholars program in Chicago in the past and a recent survey of our faculty about their interest in teaching in Chicago confirms there is still significant interest. In particular, there is a small, critical mass of faculty (about 10 to 20 out of 100+ tenure-track and specialized faculty) who have expressed a strong interest in visiting on a regular basis to offer classes in Chicago or in actually moving to Chicago, and this is more than sufficient to support the planned MCS in Chicago and the City Scholars programs. Motivations for faculty are varied from a desire to be in a city, collaborate with faculty in other universities in Chicago, engage with companies, or to explore the possibility of commercializing their research.

6. Do you know of any precedent for Chicago-based programs like this? (Gies used to have a Chicago-based executive MBA program, so that's at least one program to prove this isn't breaking radical new ground.)

We are not aware of all programs offered by the University of Illinois. However, our searches and consultations with knowledgeable people such as Kathy Martensen, have identified the following programs that have some components in Chicago.

- The fairly recently approved [BSW Completer Program](https://www.senate.illinois.edu/20201116senate/EP21021_FINAL_20201116.pdf) is a 2-year program for community college graduates to obtain a BSW degree while residing in metro-Chicago. [https://www.senate.illinois.edu/20201116senate/EP21021\\_FINAL\\_20201116.pdf](https://www.senate.illinois.edu/20201116senate/EP21021_FINAL_20201116.pdf)
- The [iMSW](https://socialwork.illinois.edu/academics/graduate-programs/imsw-hybrid-program/) is a hybrid program that meets on the Urbana campus or at the Illini Center four Saturdays a term. (<https://socialwork.illinois.edu/academics/graduate-programs/imsw-hybrid-program/>) [https://www.senate.illinois.edu/20201116senate/EP21021\\_FINAL\\_20201116.pdf](https://www.senate.illinois.edu/20201116senate/EP21021_FINAL_20201116.pdf)
- [Educational Administration and Leadership](#) offers graduate degrees and certificates off-campus in the Chicago area: a Master of Education (EdM), a Certificate of Advanced Study (CAS), and a Doctor of Education (EdD).
- [Learning & Behavior Specialist II \(LBSII\) in Multiple Disabilities](#) offers an Off-Campus Master of Education (EdM) program.

Programs that were offered in the Chicago area in the past, but do not appear to be currently active:

- MS in Accountancy (referenced in this 2008 proposal to EdPol): <https://www.senate.illinois.edu/ep0844.pdf>
- MS in Taxation: <https://www.senate.illinois.edu/ep0844.pdf>
- MBA in Chicago: <https://www.senate.illinois.edu/sc0406.asp>



Tech. Talent. Research.

November 28, 2021

TO: Dean Rashid Bashir  
Prof. Nancy M. Amato

We are extremely excited by Grainger Engineering filling a large unmet demand for tech employees and tech leaders with their CS-MCS program. As you might know, the tech ecosystem employment in Illinois, which as of 2020 totals 442,076 jobs, represents 7.2 percent of the state's workforce. From 2010 through 2019, tech employment in Illinois grew by 15.6 percent (Source: CompTIA Cyberstates Reports).

The tech ecosystem is integral to all of Illinois' core industries, including finance, agriculture, manufacturing, logistics and healthcare. Our tech ecosystem is, however, not growing fast enough since there are thousands of unfilled jobs based on DPI / IWERC and others employment and job board surveys and research.

We are lacking programmer, data analytics, cyber specialists, and most of all tech leaders. The lack of qualified and available talent is not limited to entry level jobs. Demand is such that we need an extensive effort to train talent for every position.

There is evidence that Chicago is limited in its ability to attract major tech firms due to the lack of tech leaders with at least mid-career tech experience, which the CS MCS would start to address. A reason for Amazon rejecting Chicago as a second headquarters was our limited pool of seasoned tech leaders. Other regions continue to outpace Chicago, in particular, and Illinois overall. The CS-MCS starts to fill this gaping hole in our economy.

DPI is excited to host the CS MCS program as well as the City Scholars program in Chicago. DPI has the capacity for these programs, and they are integral to DPI's success. We will make classroom space available and as well as all the common areas, as these and other core programs need them. As this program grows, which I am sure it will, DPI is committed to working closely with Grainger and the CS leadership to support their future space and program needs.

City Scholars and the CS MCS programs are needed for Chicago, for Cook County, for Illinois, and for DPI. We are in full support.

Best Regards,

A handwritten signature in black ink, appearing to read 'William C. Jackson', with a large, stylized loop at the end.

William C. Jackson  
Executive Director of Discovery Partners Institute

**DISCOVERY PARTNERS INSTITUTE**

CHICAGO 200 S. Wacker Drive, 4<sup>th</sup> Floor | Chicago, IL 60606  
URBANA 506 South Wright Street, MC 365 | Urbana, IL 61801 | (312) 585-9095

November 30, 2021

Dear Professor Nolan:

Please accept the collective thanks from the Grainger College of Engineering in your work – and that of your subcommittee members – on the “MCS in Chicago” proposal, Senate Ed Pol EP.22.051, Computer Science, MCS (on-campus & online).

Appended to this letter are communication summaries between (1) GCOE Dean Rashid Bashir and UIC Dean of Engineering Peter Nelson and (2) UIUC CS Department Head Nancy Amato and UIC CS Department Head Robert (Bob) Sloan. These summaries document the interactions between the campus’ engineering deans and the corresponding CS department heads concerning the impact, synergies and relationships from UIUC providing an in-person Master of Computer Science (MCS) professional graduate degree in the Chicago area. In Professor Amato’s summary, she references a support letter from DPI Director Bill Jackson which you should have separately received. I can also provide the DPI letter if desired.

Thank you for all of your help and support.

Sincerely,



Daniel J. Bodony  
Blue Waters Professor  
Donald Biggar Willett Faculty Scholar  
Department of Aerospace Engineering  
Department of Mechanical Science & Engineering (by courtesy)  
Associate Dean for Graduate, Professional, and Online Programs  
Grainger College of Engineering  
University of Illinois at Urbana-Champaign

## **Summary of communications between UIUC Dean Bashir and UIC Dean Nelson**

“Rashid Bashir, Dean of the Grainger College of Engineering at UIUC contacted the Dean of Engineering at UIC Peter Nelson via email to arrange a call. The call took place on Friday 10/22/21. In this call, Dean Bashir informed Dean Nelson of the College’s and CS’s plans to offer the MCS program in person in Chicago at the DPI site. Dean Bashir informed Dean Nelson of the Grainger College’s broader strategy to have an educational and research presence in Chicago. Dean Bashir informed Dean Nelson that the Grainger College and the CS department aspires to further create the additional and much needed tech talent by offering the MCS degree in person in Chicago, and build affinity and professional relationships of these students with Chicago with hopes of retaining them in the state of Illinois and the city of Chicago. We also want to meet the tremendous demand in our programs from the top-ranked computer science department in the country. Dean Bashir also reminded of Dean Nelson of the fact that we already offer the CityScholars program in Chicago and also offer iCAN, a recently-approved an online non degree transcriptable computing certificate for non-specialists, that is unique in the state. The MCS program is a next step towards this broader goal of attracting and retaining top students in Chicago via our brand. The faculty that will teach this program in Chicago will also eventually form the basis of the translational research in the newly formed and growing Discovery Partners Institute. Dean Bashir informed Dean Nelson of our college’s desire to make DPI successful. Dean Nelson appreciated the call and the advance notice. Dean Bashir encouraged him to inform his Provost as he had informed the UIUC Provost and Chancellor. Dean Bashir has also informed President Killeen of CS’s desire to offer the MCS programs in Chicago.”



## **Summary of communications between UIUC CS Department Head Amato and UIC CS Department Head Sloan**

“Nancy Amato, UIUC CS Department head, spoke with Professor Bob Sloan, the CS Department Head at UIC, on November 17, 2021. She shared with him our interest offering our professional masters degree (MCS) program, a course-work only masters degree that we already offer in Urbana and online, at the Discovery Partners Institute (DPI) space in the Illini Center at 200 S. Wacker Drive. She shared that the College of Engineering's CityScholars Program, which is a program in which juniors and seniors majoring in CS, CS+X, CE, and EE, are placed in internships with companies in Chicago and also take 200-400 level CS and ECE courses online or offered in person at the DPI space in Chicago, is already offered in Chicago. She described how the MCS program at the DPI in Chicago would be synergistic with the CityScholars program in that the MCS program will utilize the same classroom space in the DPI that the CityScholars program does and, in many cases, uses the same courses. In particular, the MCS students would also be able to take the 400-level courses already offered for CityScholars students. Further, she explained that the CityScholars students will also benefit as they will have a greater selection of courses to choose from as we teach more 400-level courses in Chicago. The current number of students in the City Scholars program and the number of students planned for the MCS in Chicago are such that we believe that we will have the capacity to meet the demand for all Chicago-based students in our courses taught there. Students in the MCS program in Chicago will also have access to the courses taught in our online MCS, providing them additional options and ensuring they have a pathway towards timely completion of the degree. The DPI administration has committed to continue providing us access to the classroom space in the DPI for our programs, and is committed to maintaining that support when the DPI moves to the new building on The 78.

Prof. Sloan shared that UIC also has more demand for their masters degree in CS than they can accommodate. In particular, he shared they have an MS program with options for a thesis (similar to the MS program in Urbana) and for a coursework only option (similar to the MCS program in Urbana). Since the UIC CS faculty prefer the applicants in the thesis option, they end up declining many of the coursework-only MS applicants. The MCS program in Chicago would therefore be providing an option that fulfills a demand for students interested in a coursework only masters degree in Chicago that UIC is not currently able to meet.”



## **Senate Committee on Educational Policy**

Committee comments on EP.22.051, Computer Science, MCS (on-campus and online)

Dean Rashid Bahir (Grainger College of Engineering), Professor Nancy Amato (Head of Computer Science), and Professor Daniel Bodony (Associate Dean for Graduate, Professional, and Online Programs in the Grainger College of Engineering) attended the Education Policy Committee's meeting on November 29, 2021 in order to discuss the proposal. The Committee asked numerous questions about the proposal both before and during the meeting. The sponsors' responses to many of these are attached to this proposal (CS Responses to Ed Pol). The sponsors also provided a letter of support from Discovery Partners Institute Director Bill Jackson which we have also attached (Letter of Support for Chicago MCS from DPI). Finally, based on our discussion during the meeting regarding outreach to UIC, the sponsors prepared the attached document (GCOE Communications with UIC regarding Chicago MCS), which summarizes two conversations they had with UIC: the first between Dean Bashir and UIC Engineering Dean Peter Nelson, and the second between Professor Amato and UIC CS Department Head Robert Sloan. As Professor Bodony notes, "These summaries document the interactions between the campus' engineering deans and the corresponding CS department heads concerning the impact, synergies and relationships from UIUC providing an in-person Master of Computer Science (MCS) professional graduate degree in the Chicago area."

The Committee was satisfied with the responses of Dean Bashir and Professors Amato and Bodony and passed the proposal without objection. The one abstention was from an EPC member from Engineering who had already voted on the proposal as a member of a curriculum committee in Engineering.

If passed by the UIUC Senate, this proposal would go to the University Senates Conference, where it will be considered by representatives of all three campuses, and then the Illinois Board of Higher Education for further review and approval.