

DATE: November 15, 2021

TO: Senate

FROM: Dr. Dwight Deugo, Vice-Provost and Associate Vice-President (Academic), and Chair, Senate Quality Assurance and Planning Committee

RE: 2022-23 Calendar Curriculum Proposals
Undergraduate and Graduate Major Modifications & Name Change

Background

Following Faculty Board approval, name changes and, as part of academic quality assurance, major curriculum modifications are considered by the Senate Quality Assurance and Planning Committee (SQAPC) before being recommended to Senate. Major curriculum modifications are also considered by the Senate Committee on Curriculum, Admissions and Studies Policy (SCCASP).

Documentation

Recommended calendar language, along with supplemental documentation as appropriate, are provided for consideration and approval.

Omnibus Motion

In order to expedite business with the multiple changes that are subject to Senate approval at this meeting, the following omnibus motion will be moved. Senators may wish to identify any of the following 4 changes that they feel warrant individual discussion that will then not be covered by the omnibus motion. Independent motions as set out below will nonetheless be written into the Senate minutes for those major modifications that Senators agree can be covered by the omnibus motion.

THAT Senate approve the major modifications and name change as presented below.

Name Change

1. Women's and Gender Studies

SQAPC approval: August 26, 2021

SQAPC Motion:

THAT SQAPC recommends to Senate the approval of the name change of the Pauline Jewett Institute of Women's and Gender Studies to the Feminist Institute of Social Transformation as presented.

Senate Motion November 26, 2021

THAT Senate approve the name change of the Pauline Jewett Institute of Women's and Gender Studies to the Feminist Institute of Social Transformation as presented.

Major Modifications

1. Undergraduate Programs in Computer Science

SCCASP approval: November 2, 2021

SQAPC approval: November 11, 2021

Senate Motion November 26, 2021

THAT Senate approve the major modification to the undergraduate programs in Computer Science as presented with effect from Fall 2022.

2. Master of Human-Computer Interaction

SCCASP approval: November 2, 2021

SQAPC approval: November 11, 2021

Senate Motion November 26, 2021

THAT Senate approve the major modification to the Master of Human-Computer Interaction as presented with effect from Fall 2022.

3. Political Economy

SCCASP approval: November 2, 2021

SQAPC approval: November 11, 2021

Senate Motion November 26, 2021

THAT Senate approve the introduction of PECO 5904, 5905 and the deletion of PECO 5906, 5907 as presented with effect from Fall 2022.

MEMORANDUM

To: Vice-President's Academic and Research Committee (VPARC) for A1s

From: Ann Cvetkovich, Director, Pauline Jewett Institute of Women's and Gender Studies

CC: Pauline Rankin, Dean, ODFASS
Peter Thompson, Associate Dean, ODFASS

Date: March 10, 2021; revised July 8, 2021

Subject: Change name of Pauline Jewett Institute of Women's and Gender Studies to Feminist Institute of Social Transformation

Modification Description

Change in Structure of PJIWGS

As the culmination of changes over the last two years in the structure of the Pauline Jewett Institute of Women's and Gender Studies, we are requesting a change in name – to the Feminist Institute of Social Transformation -- that reflects our new identity and vision. In 2018, we incorporated the minors in Sexuality Studies (SXST) and Disability Studies (DBST) that had previously been housed in the Institute of Interdisciplinary Studies; in 2021, we will also add a new minor in Critical Race Studies (CRST). We have also made revisions to our Major and Minors in Women's and Gender Studies that encourage our students to work intersectionally across all of the areas of study that we house – and that will also make it possible for students in SXST, DBST, and CRST to pursue their interests through our degree programs.

Feminist Institute of Social Transformation

Our new name reflects a desire to find an umbrella category that represents all of our programs and areas of study. We considered a list of the intersecting categories we cover – gender, sexuality, race, disability – but decided that it was too cumbersome and that it wasn't flexible enough to incorporate future changes that might be important as these interdisciplinary fields of study shift and evolve. We are drawing from the experience of many departments and programs in Women's Studies that have added "gender" and/or "sexuality" to their names in order to reflect changes in the field – and which also are now working to indicate their commitments to anti-racism and critical studies – often what is signaled by calls for greater "intersectionality."

All of our interdisciplinary fields of study are anchored in critical methodologies that foster firm ethical-political commitment to praxis. Social transformation signifies this commitment to both critical analysis of systemic oppression and its multiple manifestations on

structural and micropolitical levels and the creation of possibilities for change and alternative world-making endeavours. The term “social transformation” reflects the principle of praxis that is central to feminism and other traditions of radical thought and also maintains an intellectual openness to the ways that change can be enacted. Social transformation reflects a flexible approach to decolonial practice, anti-racism, queer world-making, gender equity, and disability justice that invites imaginative and creative dialogue honouring different approaches to systemic change taken up by LGBTQ+, disabled, and BIPOC communities on multiple scales, including transnational, regional, state/provincial, local, and intimate publics.

In short, the term “Social Transformation” signals our commitment to social change. We did not want to use the term “Social Justice” since that is already in use by the Human Rights and Social Justice program (with which we share faculty and goals), as well as the Social Justice track in Sociology. Models for our name change include the School of Social Transformation at U of Utah, which houses Gender Studies, Ethnic Studies, and Disability Studies; the School of Social Transformation at Arizona State, which includes Women and Gender Studies, Justice Studies, African and African American Studies, and Asian Pacific American Studies; and the Institute of Gender, Sexuality, Race and Social Justice at UBC.

We decided to keep Feminism prominent in our name in order to indicate the institutional and scholarly foundation for our work, as well as to distinguish ourselves from the many other units at Carleton that do work in social justice and social transformation. We are aware that the term “feminism” is a contested one – even from within “feminism” and scholarship and activism on women and gender – and we look forward to using our name as an opportunity to continue to foster debate and dissent about the use of the term. As part of that work, we are aware that the acronym for the Institute’s new name will be FIST – and we welcome the opportunity to link our name to the histories and traditions of activism, including both Women’s Liberation and Black Power movements, as well as sex-positive activism, that have used the fist as a sign of militancy and solidarity.

We are in a time when many programs in Women’s Studies are changing names to reflect their intersectional mission. Such changes reflect the ways that critical scholarly programs trouble the divisions between the academy and communities beyond the university. Like our colleagues located in the institutions mentioned above, our faculty and students, both graduate and undergraduate, are located within minoritized or historical marginalized communities. Our commitment to reflect the intersectionality of scholarship, advocacy, and activism is rooted in community engagement beyond our Institute. Bridging the gaps between scholarship and community in order to achieve social change is a key facet to our recruitment and retention strategies. Similar to other institutions that have changed the name of their Institutes and Departments, we believe strongly that ‘social transformation’ draws students and community members whose lives reflect multiple subject locations and commitments to cultural and social change within their broader communities.

While we understand the important feminist history that is reflected in the use of Pauline Jewett’s name in connection with the Institute of Women’s and Gender Studies, we feel that this naming practice no longer reflects the current state of the field. As part of a general reflection

on systems of power, especially systemic racism, the practice of naming buildings, monuments, and places after white settlers – often men – has come under critique, and, indeed, Carleton itself is currently exploring name changes for some of its buildings. The strategy of inclusion whereby women joined men as heroes and heroines has had a powerful transformative effect but doesn't necessarily challenge systems of elitism. We would prefer not to name the Institute after a single exceptional person, but instead commit to collective action in which all are important. However, we would certainly continue to acknowledge the history of the Institute and the recognition afforded to Pauline Jewett and others of her generation in making institutional space for women and feminism. Discussions are underway for how to do that in concrete ways through events, awards, and other forms of public history.

Please note that our name change applies only to the umbrella category for the Institute as a whole – we are not changing the names of our degree programs at the undergraduate or graduate levels. Our plan is to work with this configuration for a few years, including outreach and publicity to prospective students, before deciding if further changes are warranted. We want students to continue to be able to find their way to the established identities of our programs in Women's and Gender Studies, Sexuality Studies, and Disability Studies. We are also excited to begin the process of publicizing our Critical Race Studies Minor, particularly at this critical juncture when Carleton, along with many other educational institutions, is making new efforts to address institutional racism. We expect to work closely with other units making new hires and developing new curriculum in this area – and we hope our name will also serve as a capacious foundation from which to work proactively with a range of units. We feel that the Feminist Institute of Social Transformation is a name that will incorporate and adapt to other institutional changes over time.

Impact on Other Programs

We understand our name change to reflect an ongoing willingness to collaborate with our “sister” units (an interestingly gendered term used within FASS!), especially those explicitly committed to social justice, such as Human Rights and Social Justice, Childhood and Youth Studies, Sociology and Anthropology, Indigenous and Canadian Studies, and African Studies. We already work closely with these units in our teaching, including co-supervision of students, co-sponsorship of events, etc. We seek to replace siloed disciplines and departments and instead work in tandem through points of commonality that can anchor stronger relations and more robust working relationships. As Carleton also builds capacity in Critical Race Studies and Indigenous Studies, including through the hire of new faculty, we see the Feminist Institute of Social Transformation playing a central role in a multi-faceted set of strategies for equity, diversity, inclusion, and accessibility.

Resources

There will be no real change in any of the categories listed in the template since this is simply a request for a change of name that better reflects existing programs and curriculum, including the new Minor in CRST. We have added a new faculty member in Critical Race Studies (Manjeet

Birk starting July 2021) and are in the process of completing a hire in Critical Disability Studies to start in July 2021. These new faculty members will be part of a cluster of new hires that address urgent issues of diversity and inclusion at the university, and we seek to contribute to that larger strategic mission.

There will, of course, be some kinds of administrative tasks involved in making the name change: changes to the website and other publicity, a change of logo, signage in our offices (once we are finally back on campus!), etc. We have allotted money from our carry forward budget to cover expenses, such as signs and design of a new logo. We have also been planning with our staff in anticipation of this change – which is already underway because of publicity for the larger vision that has been part of the rollout of our curriculum changes. Our staff person, Ann Morneau, has been working on our website and our social media and will be able to handle the changes there, and our administrator Lana Keon will help with signage and any other updates to our offices and physical space. We will also hope to further publicize the name change and the vision for the Institute that it represents through a launch event and our ongoing Feminist Futures lecture series.

From: [Ann Cvetkovich](#)
To: [Dwight Deugo](#); [Christina Noja](#)
Cc: [Peter Thompson](#)
Subject: Name change for Pauline Jewett Institute of Women's and Gender Studies
Date: July 8, 2021 2:41:01 PM

Dear Dwight:

As requested by SQAPC in response to our proposal to change the name of the Pauline Jewett Institute of Women's and Gender Studies to the Feminist Institute of Social Transformation, I am forwarding the following correspondence with Holly Greatrex in Advancement, who has confirmed that there are no financial obligations to the Institute from the estate.

With Holly's assistance, I have also been able to contact Pauline Jewett's niece, Pauline Coupar, who is the primary contact for the estate, and I have let her know about the plans to change the name of the Institute. I can also forward that correspondence if it would be useful.

SQAPC also requested some changes to our proposal and I will submit the revised version in an email to follow.

Please let me know if there is anything else I can provide for the committee's review as we prepare to have the proposal submitted for approval by Senate and by the FASS Faculty Board.

Best,
Ann

Ann Cvetkovich (she/hers)
Director, Pauline Jewett Institute of Women's and Gender Studies
Carleton University
1403 Dunton Tower
1125 Colonel By Drive
Ottawa, ON K1S 5B6
Carleton University is located on unceded territory of the Algonquin peoples.

From: Holly Greatrex <HollyGreatrex@Cunet.Carleton.Ca>
Date: Tuesday, May 11, 2021 at 11:01 AM
To: "jennifer.conley" <Jennifer.Conley@carleton.ca>, Dwight Deugo <DwightDeugo@CUNET.CARLETON.CA>, Ann Cvetkovich <AnnCvetkovich@cunet.carleton.ca>
Subject: RE: SQAPC Outcome Memo

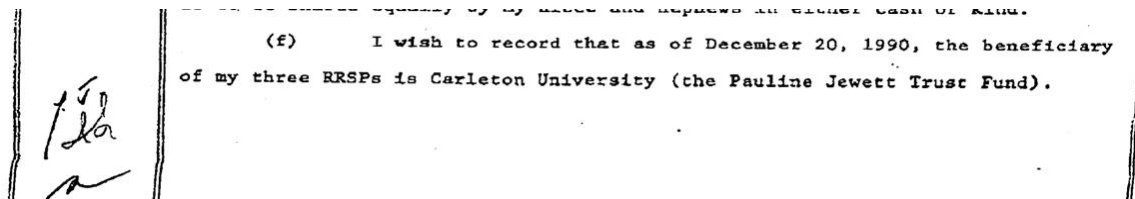
Jennifer, Dwight and Ann,

I am happy to provide some information from an estate perspective. We have a copy of Dr. Pauline Jewett's will on file.

Pauline Jewett's will (dated in February of 1991) recorded that the beneficiary of 3 RRSP's was Carleton University (the Pauline Jewett Trust Fund). The Pauline Jewett Trust Fund was established in 1990 but the name changed to the Pauline Jewett Awards. The will makes no mention of the Pauline Jewett Institute of Women's and Gender Studies.

The Estate of Pauline Jewett made a gift of \$626,508 in December 1995 to the Pauline Jewett Awards. These awards are distributed annually to students entering a program at Carleton University from a high school in Canada. Below is the section of the will that mentions Carleton University.

I do not see any obligations to the Pauline Jewett Institute of Women's and Gender Studies from the estate.



Please let me know if you have any other questions or if I can be of further assistance.

Many thanks,

Holly

Holly Greatrex, CFRE

Associate Director, Planned Giving

Carleton University

4104 HCI

1125 Colonel By Drive

Ottawa, ON K1S 5B6

613-520-2600 ext. 3096

holly.greatrex@carleton.ca

Website: <http://planforgood.carleton.ca>

For your protection, Carleton University does not accept and will not process credit card information provided via email, voicemail, fax or text messages. Please call us at 613 520 3636 to speak with Reception or leave a callback number and we will gladly assist you.

On May 11, 2021, at 9:40 AM, Dwight Deugo <DwightDeugo@cunet.carleton.ca> wrote:

Hi Jennifer,

Can you recommend a contact with your team to help Ann with her search on financial ties with Pauline Jewett or her estate? The Pauline Jewett Institute Women's and Gender Studies is changing their name and they want to search to see if there are any implications in doing so.

Cheers,
--Dwight

Dwight Deugo
Vice-Provost & Associate Vice-President (Academic)
Carleton University,
Office of Vice-Provost and Associate Vice-President (Academic)
1125 Colonel By Drive, 3600 Carleton Technology & Training Centre (CTTC)
Ottawa, Ontario K1S 5B6
Tel: (613) 520-2600
dwightdeugo@cunet.carleton.ca
Canada's Capital University

This email contains links to content or websites. Always be cautious when clicking on external links or attachments. If in doubt, please forward suspicious emails to phishing@carleton.ca.

Date Submitted: 10/18/21 8:54 am

Viewing: **BCS-UBCS : Computer Science B.C.S.
Honours**

Last approved: 03/26/20 8:59 am

Last edit: 10/18/21 6:05 pm

Last modified by: edinastorfer

Changes proposed by: nataliephelan

In Workflow

1. **COMP ChairDir UG**
2. **SCI Dean**
3. **COMP FCC**
4. **COMP FBoard**
5. **PRE SCCASP**
6. SCCASP
7. SQAPC
8. Senate
9. PRE CalEditor
10. CalEditor

Approval Path

1. 10/06/21 2:50 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
2. 10/06/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
3. 10/06/21 3:13 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard
4. 10/18/21 8:53 am
Natalie Phelan
(nataliephelan): Rollback
to Initiator
5. 10/18/21 3:06 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
6. 10/18/21 3:07 pm
Julia Wallace
(juliawallace): Approved
for SCI Dean
7. 10/18/21 3:11 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
8. 10/18/21 3:12 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard

History

1. May 5, 2014 by sandra
2. Feb 6, 2017 by doughtowe
3. Mar 26, 2020 by Sarah Cleary (sarahcleary)

Calendar Pages Using this Program [Computer Science](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	BCS-UBCS
Level	Undergraduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science
Degree	Bachelor of Computer Science
Title	Computer Science B.C.S. Honours

Program Requirements

Computer Science B.C.S. Honours (20.0 credits)

A. Credits Included in the Major CGPA (9.0 credits)

1. 6.5 credits in:

6.5

COMP 1405 [0.5]	Introduction to Computer Science I
COMP 1406 [0.5]	Introduction to Computer Science II
COMP 1805 [0.5]	Discrete Structures I
COMP 2401 [0.5]	Introduction to Systems Programming
COMP 2402 [0.5]	Abstract Data Types and Algorithms
COMP 2404 [0.5]	Introduction to Software Engineering
COMP 2406 [0.5]	Fundamentals of Web Applications
COMP 2804 [0.5]	Discrete Structures II
COMP 3000 [0.5]	Operating Systems
COMP 3004 [0.5]	Object-Oriented Software Engineering
COMP 3005 [0.5]	Database Management Systems
COMP 3007 [0.5]	Programming Paradigms
COMP 3804 [0.5]	Design and Analysis of Algorithms I

2. 0.5 credit in COMP at the 2000-level or above	0.5
3. 2.0 credits in:	2.0
COMP 4905 and 1.5 credits in COMP at the 4000-level, or	
COMP 4906 and 1.0 credit in COMP at the 4000-level, or	
2.0 credits in COMP at the 4000-level	
B. Credits Not Included in the Major CGPA (11.0 credits)	
4. 1.5 credits from:	1.5
MATH 1007 [0.5] Elementary Calculus I	
MATH 1104 [0.5] Linear Algebra for Engineering or Science	
0.5 credit in MATH at the 2000-level or above	
5. 0.5 credit in:	0.5
STAT 2507 [0.5] Introduction to Statistical Modeling I	
6. 5.0 credits in Breadth Electives	5.0
7. 4.0 credits in free electives.	4.0
Total Credits	20.0

New Resources	No New Resources
Summary	<p>Add "or 2.0 credits in COMP at the 4000-level" to allow COMP 4905 and COMP 4906 to be optional.</p> <p>With the rapid increase in student numbers, students are having increased difficulty finding supervisors and have not always been able to complete COMP 4905 or COMP 4906. We will allow students to substitute another 4th-year course to complete their program.</p> <p>NB: Per OVPQA, changed to major mod workflow. NP Oct 18/21</p>
Rationale for change	<p>The province (Ontario Universities Council on Quality Assurance) does not explicitly expect a course to bear the name "project" or "thesis". Requirements are formulated in terms of Learning Outcomes (LOs) and Degree Level Expectations (DLEs). We can very well achieve the requirements with project courses. The DLEs that are usually mainly met by Honours Projects are adequately covered in the BCS by other courses. For instance, we have a core third year software engineering course (COMP 3004) that is entirely project based and addresses LO8. Furthermore, several of our fourth-year courses have projects worth a significant part of their grade (e.g. 50%). For example, in COMP 4203, 50% of final grade is allocated to a project.</p>
Transition/Implementation	No impact.
Program reviewer comments	<p>nataliephelan (10/18/21 8:53 am): Rollback: Rollback to change to major mod workflow; no action needed on your part.</p> <p>nataliephelan (10/18/21 6:05 pm): Rationale added.</p>

Key: 776

Date Submitted: 10/18/21 8:48 am

Viewing: **BCS-597 : Computer Science
Algorithms Stream B.C.S. Honours**

Last approved: 03/26/20 8:59 am

Last edit: 10/18/21 6:01 pm

Last modified by: nataliephelan

Changes proposed by: nataliephelan

In Workflow

1. **COMP ChairDir UG**
2. **SCI Dean**
3. **COMP FCC**
4. **COMP FBoard**
5. **PRE SCCASP**
6. SCCASP
7. SQAPC
8. Senate
9. PRE CalEditor
10. CalEditor

Approval Path

1. 10/06/21 2:52 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
2. 10/06/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
3. 10/06/21 3:13 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard
4. 10/18/21 8:48 am
Natalie Phelan
(nataliephelan): Rollback
to Initiator
5. 10/18/21 3:05 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
6. 10/18/21 3:07 pm
Julia Wallace
(juliawallace): Approved
for SCI Dean
7. 10/18/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
8. 10/18/21 3:12 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard

History

1. May 5, 2014 by sandra

2. Feb 6, 2017 by
doughowe

3. Jan 17, 2018 by
doughowe

4. Mar 26, 2020 by Sarah
Cleary (sarahcleary)

Calendar Pages Using this Program

[Computer Science](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	BCS-597
Level	Undergraduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science
Degree	Bachelor of Computer Science
Title	Computer Science Algorithms Stream B.C.S. Honours

Program Requirements

Computer Science

Algorithms Stream

B.C.S. Honours (20.0 credits)

A. Credits Included in the Major CGPA (10.0 credits)		
1. 6.5 credits in:		6.5
COMP 1405 [0.5]	Introduction to Computer Science I	
COMP 1406 [0.5]	Introduction to Computer Science II	
COMP 1805 [0.5]	Discrete Structures I	
COMP 2401 [0.5]	Introduction to Systems Programming	
COMP 2402 [0.5]	Abstract Data Types and Algorithms	
COMP 2404 [0.5]	Introduction to Software Engineering	
COMP 2406 [0.5]	Fundamentals of Web Applications	
COMP 2804 [0.5]	Discrete Structures II	
COMP 3000 [0.5]	Operating Systems	
COMP 3004 [0.5]	Object-Oriented Software Engineering	

COMP 3005 [0.5]	Database Management Systems	
COMP 3007 [0.5]	Programming Paradigms	
COMP 3804 [0.5]	Design and Analysis of Algorithms I	
2. 1.5 credits in:		1.5
COMP 3801 [0.5]	Algorithms for Modern Data Sets	
COMP 3803 [0.5]	Introduction to Theory of Computation	
COMP 4804 [0.5]	Design and Analysis of Algorithms II	
3. 0.5 credit in:		0.5
COMP 4001 [0.5]	Distributed Computing	
4. 1.5 credits in:		1.5
COMP 4905 and 1.0 credit in COMP at the 4000-level, or		
COMP 4906 and 0.5 credit in COMP at the 4000-level, or		
1.5 credits in COMP at the 4000-level		
B. Credits Not Included in the Major CGPA (10.0 credits)		
5. 1.5 credits from:		1.5
MATH 1007 [0.5]	Elementary Calculus I	
MATH 1104 [0.5]	Linear Algebra for Engineering or Science	
0.5 credit in MATH at the 2000-level or above		
6. 0.5 credit in:		0.5
STAT 2507 [0.5]	Introduction to Statistical Modeling I	
7. 5.0 credits in Breadth Electives		5.0
8. 3.0 credits in free electives		3.0
Total Credits		20.0
<hr/>		
New Resources	No New Resources	
Summary	Add "or 1.5 credits in COMP at the 4000-level" to allow COMP 4905 and COMP 4906 to be optional.	
Rationale for change	<p>With the rapid increase in student numbers, students are having increased difficulty finding supervisors and have not always been able to complete COMP 4905 or COMP 4906. We will allow students to substitute another 4th-year course to complete their program.</p> <p>The province (Ontario Universities Council on Quality Assurance) does not explicitly expect a course to bear the name "project" or "thesis". Requirements are formulated in terms of Learning Outcomes (LOs) and Degree Level Expectations (DLEs). We can very well achieve the requirements with project courses. The DLEs that are usually mainly met by Honours Projects are adequately covered in the BCS by other courses. For instance, we have a core third year software engineering course (COMP 3004) that is entirely project based and addresses LO8. Furthermore, several of our fourth-year courses have projects worth a significant part of their grade (e.g. 50%). For example, in COMP 4203, 50% of final grade is allocated to a project.</p>	
Transition/Implementation	No impact.	
Program reviewer comments	<p>nataliephelan (10/18/21 8:36 am): Per OVPQA, changed to major mod workflow.</p> <p>nataliephelan (10/18/21 8:48 am): Rollback: Rollback to change to major mod workflow; no action needed on your part.</p> <p>nataliephelan (10/18/21 6:01 pm): Added rationale.</p>	

Date Submitted: 10/18/21 8:53 am

Viewing: **BCS-598 : Computer Science Artificial Intelligence and Machine Learning Stream B.C.S. Honours**

Last approved: 09/29/21 4:21 pm

Last edit: 10/18/21 6:04 pm

Last modified by: edinastorfer

Changes proposed by: nataliephelan

In Workflow

1. **COMP ChairDir UG**
2. **SCI Dean**
3. **COMP FCC**
4. **COMP FBoard**
5. **PRE SCCASP**
6. SCCASP
7. SQAPC
8. Senate
9. PRE CalEditor
10. CalEditor

Approval Path

1. 10/06/21 2:52 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
2. 10/06/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
3. 10/06/21 3:13 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard
4. 10/18/21 8:52 am
Natalie Phelan
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6. 10/18/21 3:07 pm
Julia Wallace
(juliawallace): Approved
for SCI Dean
7. 10/18/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
8. 10/18/21 3:12 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard

History

1. Sep 29, 2021 by Edina Storfer (edinastorfer)

Effective Date	2022-23
Workflow	majormod
Program Code	BCS-598
Level	Undergraduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science
Degree	Bachelor of Computer Science
Title	Computer Science Artificial Intelligence and Machine Learning Stream B.C.S. Honours

Program Requirements

Computer Science Artificial Intelligence and Machine Learning Stream B.C.S. Honours (20.0 credits)

A. Credits Included in the Major CGPA (9.5 credits)

1. 6.5 credits in:

6.5

<u>COMP 1405</u> [0.5]	Introduction to Computer Science I
<u>COMP 1406</u> [0.5]	Introduction to Computer Science II
<u>COMP 1805</u> [0.5]	Discrete Structures I
<u>COMP 2401</u> [0.5]	Introduction to Systems Programming
<u>COMP 2402</u> [0.5]	Abstract Data Types and Algorithms
<u>COMP 2404</u> [0.5]	Introduction to Software Engineering
<u>COMP 2406</u> [0.5]	Fundamentals of Web Applications
<u>COMP 2804</u> [0.5]	Discrete Structures II
<u>COMP 3000</u> [0.5]	Operating Systems
<u>COMP 3004</u> [0.5]	Object-Oriented Software Engineering
<u>COMP 3005</u> [0.5]	Database Management Systems
<u>COMP 3007</u> [0.5]	Programming Paradigms
<u>COMP 3804</u> [0.5]	Design and Analysis of Algorithms I

2. 1.5 credits in:

1.5

<u>COMP 3105</u> [0.0]	Introduction to Machine Learning
<u>COMP 3106</u> [0.5]	Introduction to Artificial Intelligence

COMP 4105 [0.0]**Course COMP 4105 Not Found****COMP 4107** [0.5]

Neural Networks

3. 1.5 credits from:	1.5
COMP 4905 and 1.0 credit in COMP at the 4000-level, or	
COMP 4906 and 0.5 credit in COMP at the 4000-level, or	
1.5 credits in COMP at the 4000-level	
B. Credits Not Included in the Major CGPA (10.5 credits)	
4. 1.0 credit in:	1.0
MATH 1007 [0.5]	Elementary Calculus I
MATH 1104 [0.5]	Linear Algebra for Engineering or Science
5. 0.5 credit from:	0.5
STAT 2605 [0.5]	Probability Models
or 0.5 credit in MATH at the 2000-level or above	
6. 0.5 credit in:	0.5
STAT 2507 [0.5]	Introduction to Statistical Modeling I
7. 5.0 credits in Breadth Electives	5.0
8. 3.5 credits in free electives	3.5
Total Credits	20.0

New Resources

No New Resources

Summary

1. Add "or 1.5 credits in COMP at the 4000-level" to allow COMP 4905 and COMP 4906 to be optional.

Rationale: With the rapid increase in student numbers, students are having increased difficulty finding supervisors and have not always been able to complete COMP 4905 or COMP 4906. We will allow students to substitute another 4th-year course to complete their program.

2. Change COMP 4105 to COMP 3105.

NB: Per OVPQA, changed to major mod workflow. NP Oct 18/21

Rationale for change

The province (Ontario Universities Council on Quality Assurance) does not explicitly expect a course to bear the name "project" or "thesis". Requirements are formulated in terms of Learning Outcomes (LOs) and Degree Level Expectations (DLEs). We can very well achieve the requirements with project courses. The DLEs that are usually mainly met by Honours Projects are adequately covered in the BCS by other courses. For instance, we have a core third year software engineering course (COMP 3004) that is entirely project based and addresses LO8. Furthermore, several of our fourth-year courses have projects worth a significant part of their grade (e.g. 50%). For example, in COMP 4203, 50% of final grade is allocated to a project.

Transition/Implementation

No impact.

Program reviewer comments

nataliephelan (10/18/21 8:52 am): Rollback: Rollback to change to major mod workflow; no action needed on your part.

nataliephelan (10/18/21 6:04 pm): Rationale added.

Key: 2058

Date Submitted: 10/18/21 9:46 am

Viewing: **BCS-59 : Computer Science
Management and Business Systems Stream
B.C.S. Honours**

Last approved: 03/26/20 9:00 am

Last edit: 10/18/21 6:07 pm

Last modified by: edinastorfer

Changes proposed by: nataliephelan

In Workflow

1. **COMP ChairDir UG**
2. **SCI Dean**
3. **COMP FCC**
4. **COMP FBoard**
5. **PRE SCCASP**
6. SCCASP
7. SQAPC
8. Senate
9. PRE CalEditor
10. CalEditor

Approval Path

1. 10/06/21 3:00 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
2. 10/06/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
3. 10/06/21 3:13 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard
4. 10/18/21 9:45 am
Natalie Phelan
(nataliephelan): Rollback
to Initiator
5. 10/18/21 3:06 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
6. 10/18/21 3:07 pm
Julia Wallace
(juliawallace): Approved
for SCI Dean
7. 10/18/21 3:11 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
8. 10/18/21 3:12 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard

History

1. May 5, 2014 by sandra

2. Jan 5, 2016 by Edina Storfer (edinastorfer)

3. Feb 6, 2017 by doughtowe

4. Apr 24, 2019 by Douglas Howe (doughlawowe)

5. Mar 26, 2020 by Sarah Cleary (sarahcleary)

Calendar Pages Using this Program

[Computer Science](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	BCS-59
Level	Undergraduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science
Degree	Bachelor of Computer Science
Title	Computer Science Management and Business Systems Stream B.C.S. Honours

Program Requirements

Computer Science

Management and Business Systems Stream

B.C.S. Honours (20.0 credits)

A. Credits Included in the Major CGPA (9.0 credits)		
1. 6.5 credits in:		6.5
COMP 1405 [0.5]	Introduction to Computer Science I	
COMP 1406 [0.5]	Introduction to Computer Science II	
COMP 1805 [0.5]	Discrete Structures I	
COMP 2401 [0.5]	Introduction to Systems Programming	
COMP 2402 [0.5]	Abstract Data Types and Algorithms	
COMP 2404 [0.5]	Introduction to Software Engineering	
COMP 2406 [0.5]	Fundamentals of Web Applications	
COMP 2804 [0.5]	Discrete Structures II	

<u>COMP 3000</u> [0.5]	Operating Systems	
<u>COMP 3004</u> [0.5]	Object-Oriented Software Engineering	
<u>COMP 3005</u> [0.5]	Database Management Systems	
<u>COMP 3007</u> [0.5]	Programming Paradigms	
<u>COMP 3804</u> [0.5]	Design and Analysis of Algorithms I	
2. 0.5 credit in COMP at the 2000-level or above		0.5
3. 2.0 credits in:		2.0
<u>COMP 4905</u> and 1.5 credits in COMP at the 4000-level, or		
<u>COMP 4906</u> and 1.0 credit in COMP at the 4000-level, or		
2.0 credits in COMP at the 4000-level		
B. Credits Not Included in the Major CGPA (11.0 credits)		
4. 1.5 credits from:		1.5
<u>MATH 1007</u> [0.5]	Elementary Calculus I	
<u>MATH 1104</u> [0.5]	Linear Algebra for Engineering or Science	
0.5 credit in MATH at the 2000-level or above		
5. 0.5 credit in:		0.5
<u>STAT 2507</u> [0.5]	Introduction to Statistical Modeling I	
6. 1.0 credit from:		1.0
<u>BUSI 1003</u> and 0.5 credit in BUSI at the 2000-level, or		
<u>BUSI 1001</u> [0.5]	Principles of Financial Accounting	
& <u>BUSI 1002</u> [0.5]	Management Accounting	
7. 2.0 credits in:		2.0
<u>BUSI 2121</u> [0.5]	Introduction to Organizational Behaviour	
<u>BUSI 2301</u> [0.5]	Introduction to Supply and Operations Management	
<u>BUSI 2503</u> [0.5]	Introduction to Finance	
<u>BUSI 3402</u> [0.5]	Systems Analysis and Design	
8. 1.0 credit in:		1.0
<u>ECON 1001</u> [0.5]	Introduction to Microeconomics	
<u>ECON 1002</u> [0.5]	Introduction to Macroeconomics	
9. 1.5 credit in BUSI at the 3000-level or above		1.5
10. 3.5 credits in free electives.		3.5
Total Credits		20.0

New Resources	No New Resources
Summary	<p>Add "or 2.0 credits in COMP at the 4000-level" to allow COMP 4905 and COMP 4906 to be optional.</p> <p>With the rapid increase in student numbers, students are having increased difficulty finding supervisors and have not always been able to complete COMP 4905 or COMP 4906. We will allow students to substitute another 4th-year course to complete their program.</p> <p>NB: Per OVPQA, changed to major mod workflow. NP Oct 18/21</p>
Rationale for change	<p>The province (Ontario Universities Council on Quality Assurance) does not explicitly expect a course to bear the name "project" or "thesis". Requirements are formulated in terms of Learning Outcomes (LOs) and Degree Level Expectations (DLEs). We can very well achieve the requirements with project courses. The DLEs that are usually mainly met by Honours Projects are adequately covered in the BCS by other courses. For instance, we have a core third year software engineering course (COMP 3004) that is entirely project based and addresses LO8. Furthermore, several of our fourth-year courses have projects worth a</p>

significant part of their grade (e.g. 50%). For example, in COMP 4203, 50% of final grade is allocated to a project.

Transition/Implementation No impact.

Program reviewer comments	<p>nataliephelan (10/18/21 9:45 am): Rollback: Rollback to change to major mod workflow; no action needed on your part.</p> <p>nataliephelan (10/18/21 6:07 pm): Rationale added.</p>
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Key: 778

Date Submitted: 10/18/21 9:46 am

Viewing: **BCS-592 : Computer Science
Computer Game Development Stream
B.C.S. Honours**

Last approved: 03/26/20 9:00 am

Last edit: 10/18/21 6:06 pm

Last modified by: edinastorfer

Changes proposed by: nataliephelan

In Workflow

1. COMP ChairDir UG
2. SCI Dean
3. COMP FCC
4. COMP FBoard
5. PRE SCCASP
6. SCCASP
7. SQAPC
8. Senate
9. PRE CalEditor
10. CalEditor

Approval Path

1. 10/06/21 2:53 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
2. 10/06/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
3. 10/06/21 3:13 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard
4. 10/18/21 9:45 am
Natalie Phelan
(nataliephelan): Rollback
to Initiator
5. 10/18/21 3:06 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
6. 10/18/21 3:07 pm
Julia Wallace
(juliawallace): Approved
for SCI Dean
7. 10/18/21 3:11 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
8. 10/18/21 3:12 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard

History

1. May 5, 2014 by sandra
2. Feb 6, 2017 by
doughowe
3. Apr 27, 2017 by Sandra
Bauer (sandrabauer)
4. Mar 26, 2020 by Sarah
Cleary (sarahcleary)

Calendar Pages Using this Program [Computer Science](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	BCS-592
Level	Undergraduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science
Degree	Bachelor of Computer Science
Title	Computer Science Computer Game Development Stream B.C.S. Honours

Program Requirements

Computer Science Computer Game Development Stream B.C.S. Honours (20.0 credits)

A. Credits Included in the Major CGPA (10.0 credits)

1. 6.5 credits in:

6.5

COMP 1405 [0.5]	Introduction to Computer Science I
COMP 1406 [0.5]	Introduction to Computer Science II
COMP 1805 [0.5]	Discrete Structures I
COMP 2401 [0.5]	Introduction to Systems Programming
COMP 2402 [0.5]	Abstract Data Types and Algorithms
COMP 2404 [0.5]	Introduction to Software Engineering
COMP 2406 [0.5]	Fundamentals of Web Applications
COMP 2804 [0.5]	Discrete Structures II
COMP 3000 [0.5]	Operating Systems
COMP 3004 [0.5]	Object-Oriented Software Engineering

COMP 3005 [0.5]	Database Management Systems	
COMP 3007 [0.5]	Programming Paradigms	
COMP 3804 [0.5]	Design and Analysis of Algorithms I	
2. 2.0 credits in:		2.0
COMP 1501 [0.5]	Introduction to Computer Game Design	
COMP 2501 [0.5]	Computer Game Design and Development	
COMP 3501 [0.5]	Foundations of Game Programming and Computer Graphics	
COMP 4501 [0.5]	Advanced Facilities for Real-Time Games	
3. 1.5 credits in:		1.5
COMP 4905 and 1.0 credit in COMP at the 4000-level, or		
COMP 4906 and 0.5 credit in COMP at the 4000-level, or		
1.5 credits in COMP at the 4000-level		
B. Credits Not Included in the Major CGPA (10.0 credits)		
4. 1.5 credits from:		1.5
MATH 1007 [0.5]	Elementary Calculus I	
MATH 1104 [0.5]	Linear Algebra for Engineering or Science	
0.5 credit in MATH at the 2000-level or above		
5. 0.5 credit in:		0.5
STAT 2507 [0.5]	Introduction to Statistical Modeling I	
6. 5.0 credits in Breadth electives		5.0
7. 3.0 credits in free electives		3.0
Total Credits		20.0

New Resources	No New Resources
Summary	<p>Add "or 1.5 credits in COMP at the 4000-level" to allow COMP 4905 and COMP 4906 to be optional.</p> <p>With the rapid increase in student numbers, students are having increased difficulty finding supervisors and have not always been able to complete COMP 4905 or COMP 4906. We will allow students to substitute another 4th-year course to complete their program.</p> <p>NB: Per OVPQA, changed to major mod workflow. NP Oct 18/21</p>
Rationale for change	<p>The province (Ontario Universities Council on Quality Assurance) does not explicitly expect a course to bear the name "project" or "thesis". Requirements are formulated in terms of Learning Outcomes (LOs) and Degree Level Expectations (DLEs). We can very well achieve the requirements with project courses. The DLEs that are usually mainly met by Honours Projects are adequately covered in the BCS by other courses. For instance, we have a core third year software engineering course (COMP 3004) that is entirely project based and addresses LO8. Furthermore, several of our fourth-year courses have projects worth a significant part of their grade (e.g. 50%). For example, in COMP 4203, 50% of final grade is allocated to a project.</p>
Transition/Implementation	No impact.
Program reviewer comments	<p>nataliephelan (10/18/21 9:45 am): Rollback: Rollback to change to major mod workflow; no action needed on your part.</p> <p>nataliephelan (10/18/21 6:06 pm): Rationale added.</p>

Date Submitted: 10/18/21 8:55 am

Viewing: **BCS-5J2 : Computer Science
Computer and Internet Security Stream
B.C.S. Honours**

Last approved: 05/10/21 2:06 pm

Last edit: 10/18/21 6:06 pm

Last modified by: edinastorfer

Changes proposed by: nataliephelan

In Workflow

1. **COMP ChairDir UG**
2. **SCI Dean**
3. **COMP FCC**
4. **COMP FBoard**
5. **PRE SCCASP**
6. SCCASP
7. SQAPC
8. Senate
9. PRE CalEditor
10. CalEditor

Approval Path

1. 10/06/21 2:51 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
2. 10/06/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
3. 10/06/21 3:13 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard
4. 10/18/21 8:54 am
Natalie Phelan
(nataliephelan): Rollback
to Initiator
5. 10/18/21 3:06 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
6. 10/18/21 3:07 pm
Julia Wallace
(juliawallace): Approved
for SCI Dean
7. 10/18/21 3:11 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
8. 10/18/21 3:12 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard

History

1. May 5, 2014 by sandra
2. Jan 26, 2017 by doughowe
3. Mar 26, 2020 by Sarah Cleary (sarahcleary)
4. Feb 8, 2021 by Sarah Cleary (sarahcleary)
5. May 10, 2021 by Natalie Phelan (nataliephelan)

Calendar Pages Using this Program [Computer Science](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	BCS-5J2
Level	Undergraduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science
Degree	Bachelor of Computer Science
Title	Computer Science Computer and Internet Security Stream B.C.S. Honours

Program Requirements

Computer Science Computer and Internet Security Stream B.C.S. Honours (20.0 credits)

A. Credits Included in the Major CGPA (9.5 credits)

1. 6.5 credits in:

6.5

COMP 1405 [0.5]	Introduction to Computer Science I
COMP 1406 [0.5]	Introduction to Computer Science II
COMP 1805 [0.5]	Discrete Structures I
COMP 2401 [0.5]	Introduction to Systems Programming
COMP 2402 [0.5]	Abstract Data Types and Algorithms
COMP 2404 [0.5]	Introduction to Software Engineering
COMP 2406 [0.5]	Fundamentals of Web Applications
COMP 2804 [0.5]	Discrete Structures II

<u>COMP 3000</u> [0.5]	Operating Systems	
<u>COMP 3004</u> [0.5]	Object-Oriented Software Engineering	
<u>COMP 3005</u> [0.5]	Database Management Systems	
<u>COMP 3007</u> [0.5]	Programming Paradigms	
<u>COMP 3804</u> [0.5]	Design and Analysis of Algorithms I	
2. 2.0 credits in:		2.0
<u>COMP 3008</u> [0.5]	Human-Computer Interaction	
<u>COMP 3109</u> [0.5]	Applied Cryptography and Authentication	
<u>COMP 3203</u> [0.5]	Principles of Computer Networks	
<u>COMP 4108</u> [0.5]	Computer Systems Security	
3. 1.0 credit from:		1.0
<u>COMP 4905</u> [0.5]	Honours Project	
<u>COMP 4905</u> and 0.5 credit in COMP at the 4000-level, or		
<u>COMP 4906</u> [1.0]	Honours Thesis	
or		
1.0 credit in COMP at the 4000-level		
B. Credits Not Included in the Major CGPA (10.5 credits)		
4. 1.5 credits from:		1.5
<u>MATH 1007</u> [0.5]	Elementary Calculus I	
<u>MATH 1104</u> [0.5]	Linear Algebra for Engineering or Science	
0.5 credit in MATH at the 2000-level or above		
5. 0.5 credit in:		0.5
<u>STAT 2507</u> [0.5]	Introduction to Statistical Modeling I	
6. 5.0 credits in Breadth Electives		5.0
7. 3.5 credits in free electives		3.5
Total Credits		20.0
New Resources	No New Resources	
Summary	<p>Add "or 1.0 credit in COMP at the 4000-level" to allow COMP 4905 and COMP 4906 to be optional.</p> <p>With the rapid increase in student numbers, students are having increased difficulty finding supervisors and have not always been able to complete COMP 4905 or COMP 4906. We will allow students to substitute another 4th-year course to complete their program.</p> <p>NB: Per OVPQA, changed to major mod workflow. NP Oct 18/21</p>	
Rationale for change	<p>The province (Ontario Universities Council on Quality Assurance) does not explicitly expect a course to bear the name "project" or "thesis". Requirements are formulated in terms of Learning Outcomes (LOs) and Degree Level Expectations (DLEs). We can very well achieve the requirements with project courses. The DLEs that are usually mainly met by Honours Projects are adequately covered in the BCS by other courses. For instance, we have a core third year software engineering course (COMP 3004) that is entirely project based and addresses LO8. Furthermore, several of our fourth-year courses have projects worth a significant part of their grade (e.g. 50%). For example, in COMP 4203, 50% of final grade is allocated to a project.</p>	
Transition/Implementation	No impact.	

Program reviewer
comments

nataliephelan (10/18/21 8:54 am): Rollback: Rollback to change to major mod workflow; no action needed on your part.

nataliephelan (10/18/21 6:06 pm): Rationale added.

Key: 781

Date Submitted: 10/18/21 9:46 am

Viewing: **BCS-5H : Computer Science Software Engineering Stream B.C.S. Honours**

Last approved: 03/26/20 9:01 am

Last edit: 10/18/21 6:07 pm

Last modified by: edinastorfer

Changes proposed by: nataliephelan

In Workflow

1. **COMP ChairDir UG**
2. **SCI Dean**
3. **COMP FCC**
4. **COMP FBoard**
5. **PRE SCCASP**
6. SCCASP
7. SQAPC
8. Senate
9. PRE CalEditor
10. CalEditor

Approval Path

1. 10/06/21 3:01 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
2. 10/06/21 3:10 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
3. 10/06/21 3:13 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard
4. 10/18/21 9:46 am
Natalie Phelan
(nataliephelan): Rollback
to Initiator
5. 10/18/21 3:06 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir UG
6. 10/18/21 3:07 pm
Julia Wallace
(juliawallace): Approved
for SCI Dean
7. 10/18/21 3:11 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP FCC
8. 10/18/21 3:12 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
FBoard

History

1. May 5, 2014 by sandra

2. Feb 6, 2017 by
doughowe

3. Mar 26, 2020 by Sarah
Cleary (sarahcleary)

Calendar Pages Using this Program

[Computer Science](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	BCS-5H
Level	Undergraduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science
Degree	Bachelor of Computer Science
Title	Computer Science Software Engineering Stream B.C.S. Honours

Program Requirements

Computer Science

Software Engineering Stream

B.C.S. Honours (20.0 credits)

A. Credits Included in the Major CGPA (9.5 credits)		
1. 6.5 credits in:		6.5
COMP 1405 [0.5]	Introduction to Computer Science I	
COMP 1406 [0.5]	Introduction to Computer Science II	
COMP 1805 [0.5]	Discrete Structures I	
COMP 2401 [0.5]	Introduction to Systems Programming	
COMP 2402 [0.5]	Abstract Data Types and Algorithms	
COMP 2404 [0.5]	Introduction to Software Engineering	
COMP 2406 [0.5]	Fundamentals of Web Applications	
COMP 2804 [0.5]	Discrete Structures II	
COMP 3000 [0.5]	Operating Systems	
COMP 3004 [0.5]	Object-Oriented Software Engineering	
COMP 3005 [0.5]	Database Management Systems	
COMP 3007 [0.5]	Programming Paradigms	

<u>COMP 3804</u> [0.5]	Design and Analysis of Algorithms I	
2. 0.5 credit in:		0.5
<u>COMP 3008</u> [0.5]	Human-Computer Interaction	
3. 1.5 credits in:		1.5
<u>COMP 4004</u> [0.5]	Software Quality Assurance	
<u>SYSC 3303</u> [0.5]	Real-Time Concurrent Systems	
<u>SYSC 4106</u> [0.5]	The Software Economy and Project Management	
4. 1.0 credit from:		1.0
<u>COMP 4905</u> and 0.5 credit in COMP at the 4000-level, or		
<u>COMP 4906</u> [1.0]	Honours Thesis	
or		
1.0 credit in COMP at the 4000-level		
B. Credits Not Included in the Major CGPA (10.5 credits)		
5. 1.5 credits from:		1.5
<u>MATH 1007</u> [0.5]	Elementary Calculus I	
<u>MATH 1104</u> [0.5]	Linear Algebra for Engineering or Science	
0.5 credit in MATH at the 2000-level or above		
6. 0.5 credit in:		0.5
<u>STAT 2507</u> [0.5]	Introduction to Statistical Modeling I	
7. 5.0 credits in Breadth Electives		5.0
8. 3.5 credits in free electives.		3.5
Total Credits		20.0

New Resources	No New Resources
Summary	<p>Add "or 1.0 credit in COMP at the 4000-level" to allow COMP 4905 and COMP 4906 to be optional.</p> <p>With the rapid increase in student numbers, students are having increased difficulty finding supervisors and have not always been able to complete COMP 4905 or COMP 4906. We will allow students to substitute another 4th-year course to complete their program.</p> <p>NB: Per OVPQA, changed to major mod workflow. NP Oct 18/21</p> <p>The province (Ontario Universities Council on Quality Assurance) does not explicitly expect a course to bear the name "project" or "thesis". Requirements are formulated in terms of Learning Outcomes (LOs) and Degree Level Expectations (DLEs). We can very well achieve the requirements with project courses. The DLEs that are usually mainly met by Honours Projects are adequately covered in the BCS by other courses. For instance, we have a core third year software engineering course (COMP 3004) that is entirely project based and addresses LO8. Furthermore, several of our fourth-year courses have projects worth a significant part of their grade (e.g. 50%). For example, in COMP 4203, 50% of final grade is allocated to a project.</p>
Rationale for change	
Transition/Implementation	No impact.
Program reviewer comments	<p>nataliephelan (10/18/21 9:46 am): Rollback: Rollback to change to major mod workflow; no action needed on your part.</p> <p>nataliephelan (10/18/21 6:07 pm): Rationale added.</p>

MEMORANDUM

To: Vice-Presidents' Academic and Research Council (VPARC)

From: Robert Biddle, School of Computer Science

CC: Pauline Rankin, Dean, FASS
Larry Kostiuk, Dean, Engineering and Design
Maria DeRosa, Dean, Science
Patrice Smith, Dean, FGPA
Daniel Siddiqi, Associate Dean (Programs), FGPA

Date: August 3, 2021

Subject: Major Modification to Masters in Human-Computer Interaction – Track A1

Modification Description

Description of the new modification

- The Master of Computer Science in Human-Computer Interaction is to be **renamed** The Master of Human-Computer Interaction.
- The Master of Arts in Human-Computer Interaction and the Master of Applied Science in Human-Computer Interaction are to be **deleted**.

At the time of the CPR, the program had the following number of graduates: MA: 22; MASC: 29; MCS 13. We chose to rename the MCS not because it was the most common degree that students registered in, but because it had the most general requirements.

Measures - Student Count	Program (Degree) - All		Student Level - All		Full-Part Time - All		New - Returning - All			
Time (Academic Term)		2019 Fall	2018 Fall	2017 Fall	2016 Fall	2015 Fall		2013 Fall	2012 Fall	2011 Fall
Program (Program Hierarchy)	2020 Fall	Fall	Fall	Fall	Fall	Fall	2014 Fall	Fall	Fall	Fall
MA - Human-Computer Interaction	13	11	14	13	9	11	16	11	11	6
MASC - Human-Computer Interaction	9	10	9	10	12	14	13	15	14	7
MCS - Human-Computer Interaction	3	3	1	8	8	6	10	8	3	2
Total	25	24	24	31	29	31	39	34	28	15

Principal rationale for curricular changes

- The recent (completed November 2020) Cyclical Review of the Human-Computer Interaction (HCI) programs suggested the unification of the three versions of the Master degree in (the Master of Arts, Master of Applied Science, and the Master of Computer Science) into one degree. This suggestion was approved for enactment in our resulting Implementation Plan:

Item 1: Governance: Consider having a single HCI Master's degree, which may partially address the tenuousness of the program with respect to dedicated courses and seats for students, student supervision and recognition for this work, slow operational processes, and TA allocation. **(Deficiency)**

Response: 3- Agreed to in principle.

There is widespread agreement for having a single degree, principally because having three degrees creates unnecessary confusion for applicants. Merging the degrees was agreed several years ago and proposed to FGPA. The three programs only differ by one research methods course. In a unified program, thesis supervisors could instead that recommend which research methods course is most appropriate for the student. However, while we feel a single degree will simplify some aspects, it will not by itself address issues arising from the complex governance structure and its implications. Some of these are involved in other recommendations.

There are three listed HCI research methods courses: HCIN5400/CGSC 5101 (Experimental Methods and Statistics), HCIN5403 (Research methods in HCI), and HCIN5404/IDES 5102 (Design Research Methods). The three degrees only differ in requirements for one research methods course (MA: HCIN5400 or HCIN5403; MASc: HCIN5403 or HCIN5404; MCS: HCIN5400 or HCIN5403 or HCIN5404). It confuses applicants that there are three almost-identical degrees. Moreover, the most suitable research method course ought to depend more on the specific research topic rather than the degree name. Therefore, this change will remove confusion for students, and allow a research methods course that is more appropriate to the thesis topic.

The MCS allows the courses for either the MA or the MASc, so the simplest route is to preserve the MCS and delete the other two degrees. We therefore propose to rename the MCS (HCI) to MHCI (Master of Human-Computer Interaction) and delete the MA and MASc. We will modify the admissions requirements for the new degree to be as inclusive as any of the three current degrees.

Description of changes to program structure

- There are no changes to the program structure of the MCS as it was already the most inclusive of the three degrees.

Impact on Other Programs

No impact on other programs and/or other academic units at Carleton is foreseen.

Societal Need

HCI research is conducted in many settings. A 2003 NRC profile of HCI research in Canada points out the wide range of disciplines at Canadian universities and research establishments that host work on HCI. Individual researchers even use approaches that cross disciplinary boundaries. This means that a precise disciplinary map of HCI is difficult to construct, but this also represents a significant opportunity. The NRC study explains:

In this broadening field of HCI, Canada has the unique opportunity to foster world-class scientific innovation and excellence. Several converging factors can work together to make this goal a reality. Chief among the factors is our growing pool of highly qualified Canadian HCI researchers. Almost all universities in Canada employ at least one Ph.D. researcher in HCI. Additionally, there are government and corporate researchers in HCI giving broad coverage and good possibilities for inter-sector collaboration. The researchers are also geographically dispersed throughout Canada providing a unique opportunity to explore distance and Internet collaboration technologies as it is directly affected by our national geography. Furthermore, Canada's multilingual heritage gives us an opportunity to exploit cultural richness in creating unique technologies. Canadian HCI researchers are multidisciplinary and represented in a number of different faculties across Canada. This provides a unique opportunity for fueling innovation. Finally, the field is experiencing growth. All three sectors (government, industry, and academia) plan on expanding their HCI personnel in the future.

This demand for this expertise can also be backed up by the more recent 2018 State of Canadian UX Report found here:

<https://corneliux.medium.com/the-2018-state-of-canadian-ux-report-d61d171e063>

Student Demand

In having only one degree to apply for, we anticipate a reduction of confusion for applicants which may increase demand to the program.

Resources

No changes to resources are foreseen.

Subject: Re: HCI change letters

Date: Friday, August 13, 2021 at 3:43:03 AM New Zealand Standard Time

From: Jo-Anne Lefevre

To: Robert Biddle, Michel Barbeau, Chris Joslin

Dear Robert:

We strongly support the proposal to merge the three versions of the Masters in HCI degree to create a single degree, Masters in Human Computer Interaction. It will simplify the administration of the degree, make it more transparent for students and potential students, and be consistent with the way in which the degree has evolved.

I am writing on behalf of the Department of Cognitive Science.

I assume that any changes needed to the HCI program beyond the name change will be vetted as usual through Courseleaf.

Best, Jo-Anne

Jo-Anne LeFevre, Ph.D.
Chancellor's Professor of Cognitive Science and Psychology
Chair, Department of Cognitive Science
Carleton University
Ottawa, ON K1S 5B6

Fellow, Canadian Society for Brain, Behaviour, and Cognitive Science
Secretary, Mathematical Cognition and Learning Society

From: Robert Biddle <RobertBiddle@cunet.carleton.ca>

Date: Thursday, August 12, 2021 at 11:00 AM

To: Michel Barbeau <MichelBarbeau@cunet.carleton.ca>, Jo-Anne Lefevre
<JoAnneLefevre@CUNET.CARLETON.CA>, Chris Joslin <CHRISJOSLIN@cunet.carleton.ca>

Subject: HCI change letters

Hi again:

As you will recall, I am starting the process to propose unifying the three HCI Masters degrees into one MHCI, as discussed in the Cyclical Program Review. The reason is that the degrees are almost identical, and having three creates confusion for applicants, and makes administration more difficult than necessary.

It turns out I need to forward emails agreeing to the proposal from you as the three core unit directors.

As you know, I did check with you earlier but would like an explicit email now just to be clear. Can you please send me such an email now?

Thanks

Robert

--

Robert Biddle, PhD,

Professor of Computer Science and Cognitive Science,
Director, Human-Computer Interaction Graduate Program,
School of Computer Science, Carleton University, Ottawa, ON K1S 5B6, CANADA;
Tel. +1 613 520-2600 ext. 6317; Fax. +1 613 520-4334; Email. robert.biddle@carleton.ca

Subject: RE: HCI change letters
Date: Thursday, August 19, 2021 at 11:40:18 PM New Zealand Standard Time
From: Michel Barbeau
To: Robert Biddle, Jo-Anne Lefevre, Chris Joslin
Attachments: image001.png

Good morning everyone!

I agree with the proposal.

Michel Barbeau

Professor and Director
School of Computer Science



From: Robert Biddle <RobertBiddle@cunet.carleton.ca>
Sent: August 12, 2021 11:00 AM
To: Michel Barbeau <MichelBarbeau@cunet.carleton.ca>; Jo-Anne Lefevre <JoAnneLefevre@CUNET.CARLETON.CA>; Chris Joslin <CHRISJOSLIN@cunet.carleton.ca>
Subject: HCI change letters

Hi again:

As you will recall, I am starting the process to propose unifying the three HCI Masters degrees into one MHCI, as discussed in the Cyclical Program Review. The reason is that the degrees are almost identical, and having three creates confusion for applicants, and makes administration more difficult than necessary.

It turns out I need to forward emails agreeing to the proposal from you as the three core unit directors.

As you know, I did check with you earlier but would like an explicit email now just to be clear. Can you please send me such an email now?

Thanks

Robert

--

Robert Biddle, PhD,
Professor of Computer Science and Cognitive Science,
Director, Human-Computer Interaction Graduate Program,
School of Computer Science, Carleton University, Ottawa, ON K1S 5B6, CANADA;
Tel. +1 613 520-2600 ext. 6317; Fax. +1 613 520-4334; Email. robert.biddle@carleton.ca

Subject: RE: HCI change letters

Date: Wednesday, August 18, 2021 at 2:21:34 AM New Zealand Standard Time

From: Chris Joslin

To: Robert Biddle, Michel Barbeau, Jo-Anne Lefevre

Dear Robert:

We strongly support the proposal to merge the three versions of the Masters in HCI degree to create a single degree, Masters in Human Computer Interaction. It will simplify the administration of the degree, make it more transparent for students and potential students, and be consistent with the way in which the degree has evolved.

I am writing on behalf of the School of Information Technology.

Chris Joslin

From: Robert Biddle <RobertBiddle@cunet.carleton.ca>

Sent: August 12, 2021 11:00 AM

To: Michel Barbeau <MichelBarbeau@cunet.carleton.ca>; Jo-Anne Lefevre
<JoAnneLefevre@CUNET.CARLETON.CA>; Chris Joslin <CHRISJOSLIN@cunet.carleton.ca>

Subject: HCI change letters

Hi again:

As you will recall, I am starting the process to propose unifying the three HCI Masters degrees into one MHCI, as discussed in the Cyclical Program Review. The reason is that the degrees are almost identical, and having three creates confusion for applicants, and makes administration more difficult than necessary.

It turns out I need to forward emails agreeing to the proposal from you as the three core unit directors.

As you know, I did check with you earlier but would like an explicit email now just to be clear.

Can you please send me such an email now?

Thanks

Robert

--

Robert Biddle, PhD,

Professor of Computer Science and Cognitive Science,

Director, Human-Computer Interaction Graduate Program,

School of Computer Science, Carleton University, Ottawa, ON K1S 5B6, CANADA;

Tel. +1 613 520-2600 ext. 6317; Fax. +1 613 520-4334; Email. robert.biddle@carleton.ca

Date Submitted: 09/24/21 2:43 pm

Viewing: **TBD-1207 : R-GR-ADMREQT-Human-Computer Interaction**

Last approved: 12/15/17 1:04 pm

Last edit: 10/26/21 1:05 pm

Last modified by: sandrabauer

Changes proposed by: sandrabauer

In Workflow

1. **COMP ChairDir GR**
2. **PRE GRAD FCC**
3. **GRAD FCC**
4. **GRAD FBoard**
5. **PRE SCCASP**
6. SCCASP
7. SQAPC
8. Senate
9. CalEditor

Approval Path

1. 09/24/21 2:49 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir GR
2. 09/24/21 3:52 pm
Sandra Bauer
(sandrabauer): Approved
for PRE GRAD FCC
3. 10/12/21 1:10 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD FCC
4. 10/20/21 10:48 am
Sandra Bauer
(sandrabauer): Approved
for GRAD FBoard

History

1. Jun 18, 2015 by Sandra Bauer (sandrabauer)
2. May 5, 2017 by Sandra Bauer (sandrabauer)
3. Dec 15, 2017 by Sandra Bauer (sandrabauer)

Calendar Pages Using this
Program

[Human-Computer Interaction](#)

Effective Date

2022-23

Workflow

majormod ~~minormod~~

Program Code	TBD-1207
Level	Graduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science
Degree	
Title	R-GR-ADMREQT-Human-Computer Interaction

Program Requirements

Admission

Applicants for the **M.H.C.I. M.A.** program will normally hold an **honours Honours** degree or equivalent professional degree in a **Arts, Social Sciences, Business, or** related **field such as architecture, arts and social sciences, business, cognitive science, computer science, engineering, information technology. areas with Highest Honours.**

~~Applicants for the M.A.Sc. program will normally hold an Honours degree in Engineering, Architecture, Design, or related areas with Highest Honours. Applicants for the M.C.S. degree will normally hold an Honours degree in Computer Science. Applicants with a background in Cognitive Science will be considered for whichever of the three programs is appropriate to their particular academic background. Applicants judged to be generally acceptable but deficient in some preparation may be asked to complete course work in addition to the program requirements.~~ In addition to transcripts and letters of reference, application packages **must will** include a statement of interest outlining the applicant's **relevant background and** proposed area of research.

Applicants judged to be generally acceptable but still requiring deficient in some preparation may be asked to complete course work in course-work in addition to the program requirements.

New Resources	No New Resources
Summary	*Associated with majormod HCI degree rename* Revise admission requirements
Rationale for change	To amalgamate admission requirements from the former degree titles under the new title of M.Human-Computer Interaction.
Transition/Implementation	n/a
Program reviewer comments	sandrabauer (09/28/21 9:44 am): Removed architecture from list at request of R.Biddle nataliephelan (09/28/21 1:03 pm): Changed effective date to 22-23.

Key: 1207

Date Submitted: 09/21/21 3:02 pm

Viewing: **MCS-69S : Human-Computer
Interaction MHCI MCS**

Last approved: 02/17/21 3:54 pm

Last edit: 09/21/21 8:23 pm

Last modified by: sandrabauer

Changes proposed by: sandrabauer

In Workflow

1. **COMP ChairDir GR**
2. **SCI Dean**
3. **GRAD Dean**
4. **PRE GRAD FCC**
5. **GRAD FCC**
6. **GRAD FBoard**
7. **PRE SCCASP**
8. SCCASP
9. SQAPC
10. Senate
11. CalEditor

Approval Path

1. 09/21/21 5:50 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir GR
2. 09/22/21 1:27 pm
Yiqiang Zhao
(yiqiangzhao): Approved
for SCI Dean
3. 09/24/21 3:25 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD Dean
4. 09/24/21 3:27 pm
Sandra Bauer
(sandrabauer): Approved
for PRE GRAD FCC
5. 10/12/21 12:54 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD FCC
6. 10/20/21 10:43 am
Sandra Bauer
(sandrabauer): Approved
for GRAD FBoard

History

1. Sep 17, 2014 by vicki
2. May 5, 2017 by Sandra
Bauer (sandrabauer)
3. Jan 4, 2018 by Leslie
Macdonald-Hicks

Calendar Pages Using this Program [Human-Computer Interaction](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	MCS-69S
Level	Graduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science Human-Computer Interaction
Degree	Master of Human-Computer Interaction Computer Science
Title	Human-Computer Interaction MHCI MCS

Program Requirements

~~M.C.S.~~ **Master of** Human-Computer Interaction (5.0 credits)

Requirements:

1. 0.5 credit in:		0.5
HCIN 5100 [0.5]	Fundamentals of HCI Design and Evaluation	
2. 0.5 credit in:		0.5
HCIN 5200 [0.5]	Software and User Interface Development	
3. 0.5 credit in:		0.5
HCIN 5300 [0.5]	Emerging Interaction Techniques	
4. 0.5 credit from the following, to be selected with the approval of the supervisor		0.5
HCIN 5400 [0.5]	Experimental Methods and Statistics	
HCIN 5403 [0.5]	Research methods in HCI	
HCIN 5404 [0.5]	Design Research Methods	
5. 0.5 credit from a wide range of available electives with the guidance and permission of the supervisor of graduate studies		0.5
6. 2.5 credits in:		2.5
HCIN 5909 [2.5]	Thesis in Human-Computer Interaction	
Total Credits		5.0

New Resources No New Resources

Summary Rename degree to Master of Human-Computer Interaction and delete MA and MASc in Human-Computer interaction.

The recent (completed November 2020) Cyclical Review of the Human-Computer Interaction

Rationale for change

(HCI) programs suggested the unification of the three versions of the Master degree in (the Master of Arts, Master of Applied Science, and the Master of Computer Science) into one degree. There is widespread agreement for having a single degree, principally because having three degrees creates unnecessary confusion for applicants. Merging the degrees was agreed several years ago and proposed to FGPA. The three programs only differ by one research methods course. In a unified program, thesis supervisors could instead that recommend which research methods course is most appropriate for the student. However, while we feel a single degree will simplify some aspects, it will not by itself address issues arising from the complex governance structure and its implications. Some of these are involved in other recommendations. There are three listed HCI research methods courses: HCIN5400/CGSC 5101 (Experimental Methods and Statistics), HCIN5403 (Research methods in HCI), and HCIN5404/IDES 5102 (Design Research Methods). The three degrees only differ in requirements for one research methods course (MA: HCIN5400 or HCIN5403; MASc: HCIN5403 or HCIN5404; MCS: HCIN5400 or HCIN5403 or HCIN5404). It confuses applicants that there are three almost-identical degrees. Moreover, the most suitable research method course ought to depend more on the specific research topic rather than the degree name. Therefore, this change will remove confusion for students, and allow a research methods course that is more appropriate to the thesis topic. The MCS allows the courses for either the MA or the MASc, so the simplest route is to preserve the structure of the MCS and delete the other two degrees. We therefore propose to rename the MCS (HCI) to MHCI (Master of Human-Computer Interaction) and delete the MA and MASc. We will modify the admissions requirements for the new degree to be as inclusive as any of the three current degrees.

Transition/Implementation

In-program students will have the choice to stay with what they started, or change to the MHCI.

Program reviewer comments

sandrabauer (09/21/21 3:03 pm): program code will need to be changed after approvals

Key: 1027

A deleted record cannot be edited

Program Delete Proposal

Date Submitted: 09/21/21 3:07 pm

Viewing: **MASC-69E : Human-Computer Interaction MASC**

Last approved: 02/17/21 3:53 pm

Last edit: 09/21/21 8:22 pm

Last modified by: sandrabauer

Changes proposed by: sandrabauer

In Workflow

- 1. COMP ChairDir GR
- 2. SCI Dean
- 3. GRAD Dean
- 4. PRE GRAD FCC
- 5. GRAD FCC
- 6. GRAD FBoard
- 7. PRE SCCASP
- 8. SCCASP
- 9. SQAPC
- 10. Senate
- 11. CalEditor

Approval Path

- 1. 09/21/21 5:50 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir GR
- 2. 09/22/21 1:27 pm
Yiqiang Zhao
(yiqiangzhao): Approved
for SCI Dean
- 3. 09/24/21 3:25 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD Dean
- 4. 09/24/21 3:26 pm
Sandra Bauer
(sandrabauer): Approved
for PRE GRAD FCC
- 5. 10/12/21 12:54 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD FCC
- 6. 10/20/21 10:43 am
Sandra Bauer
(sandrabauer): Approved
for GRAD FBoard

History

- 1. Sep 17, 2014 by vicki
- 2. May 5, 2017 by Sandra Bauer (sandrabauer)

3. Jan 4, 2018 by Leslie Macdonald-Hicks (lesliemacdonaldhicks)
 4. Feb 17, 2021 by Emily Hersey (emilyhersey)

Calendar Pages Using this Program [Human-Computer Interaction](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	MASC-69E
Level	Graduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science Human-Computer Interaction
Degree	Master of Applied Science
Title	Human-Computer Interaction MASC

Program Requirements

M.A.Sc. Human-Computer Interaction (5.0 credits)

Requirements:

1. 0.5 credit in:		0.5
HCIN 5100 [0.5]	Fundamentals of HCI Design and Evaluation	
2. 0.5 credit in:		0.5
HCIN 5200 [0.5]	Software and User Interface Development	
3. 0.5 credit in:		0.5
HCIN 5300 [0.5]	Emerging Interaction Techniques	
4. 0.5 credit from:		0.5
HCIN 5403 [0.5]	Research methods in HCI	
HCIN 5404/IDES 5102 [0.5]	Design Research Methods	
5. 0.5 credit from a wide range of available electives with the guidance and permission of the supervisor of graduate studies.		0.5
6. 2.5 credits in:		2.5
HCIN 5909 [2.5]	Thesis in Human-Computer Interaction	
Total Credits		5.0

New Resources

- Summary Delete reference to MASc HCI
- Rename degree to Master of Human-Computer Interaction and delete MA and MASc in

Rationale for change

Human-Computer interaction. Rationale for change The recent (completed November 2020) Cyclical Review of the Human-Computer Interaction (HCI) programs suggested the unification of the three versions of the Master degree in (the Master of Arts, Master of Applied Science, and the Master of Computer Science) into one degree. There is widespread agreement for having a single degree, principally because having three degrees creates unnecessary confusion for applicants. Merging the degrees was agreed several years ago and proposed to FGPA. The three programs only differ by one research methods course. In a unified program, thesis supervisors could instead that recommend which research methods course is most appropriate for the student. However, while we feel a single degree will simplify some aspects, it will not by itself address issues arising from the complex governance structure and its implications. Some of these are involved in other recommendations. There are three listed HCI research methods courses: HCIN5400/CGSC 5101 (Experimental Methods and Statistics), HCIN5403 (Research methods in HCI), and HCIN5404/IDES 5102 (Design Research Methods). The three degrees only differ in requirements for one research methods course (MA: HCIN5400 or HCIN5403; MASc: HCIN5403 or HCIN5404; MCS: HCIN5400 or HCIN5403 or HCIN5404). It confuses applicants that there are three almost-identical degrees. Moreover, the most suitable research method course ought to depend more on the specific research topic rather than the degree name. Therefore, this change will remove confusion for students, and allow a research methods course that is more appropriate to the thesis topic. The MCS allows the courses for either the MA or the MASc, so the simplest route is to preserve the structure of the MCS and delete the other two degrees. We therefore propose to rename the MCS (HCI) to MHCI (Master of Human-Computer Interaction) and delete the MA and MASc. We will modify the admissions requirements for the new degree to be as inclusive as any of the three current degrees.

Transition/Implementation

In-program students will have the choice to stay with what they started, or change to the MHCI.

 Program reviewer comments

Key: 1026

A deleted record cannot be edited

Program Delete Proposal

Date Submitted: 09/21/21 3:06 pm

Viewing: **MA-69A : Human-Computer Interaction**

Last approved: 08/28/20 9:38 am

Last edit: 09/21/21 8:22 pm

Last modified by: sandrabauer

Changes proposed by: sandrabauer

In Workflow

- 1. COMP ChairDir GR
- 2. SCI Dean
- 3. GRAD Dean
- 4. PRE GRAD FCC
- 5. GRAD FCC
- 6. GRAD FBoard
- 7. PRE SCCASP
- 8. SCCASP
- 9. SQAPC
- 10. Senate
- 11. CalEditor

Approval Path

- 1. 09/21/21 5:50 pm
Michel Barbeau
(michelbarbeau):
Approved for COMP
ChairDir GR
- 2. 09/22/21 1:26 pm
Yiqiang Zhao
(yiqiangzhao): Approved
for SCI Dean
- 3. 09/24/21 3:25 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD Dean
- 4. 09/24/21 3:26 pm
Sandra Bauer
(sandrabauer): Approved
for PRE GRAD FCC
- 5. 10/12/21 12:54 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD FCC
- 6. 10/20/21 10:43 am
Sandra Bauer
(sandrabauer): Approved
for GRAD FBoard

History

- 1. Jun 2, 2014 by sandra
- 2. Sep 17, 2014 by vicki

- 3. May 5, 2017 by Sandra Bauer (sandrabauer)
- 4. Jan 4, 2018 by Leslie Macdonald-Hicks (lesliemacdonaldhicks)
- 5. Aug 28, 2020 by Sarah Cleary (sarahcleary)

Calendar Pages Using this Program [Human-Computer Interaction](#)

Effective Date	2022-23
Workflow	majormod minormod
Program Code	MA-69A
Level	Graduate
Faculty	Faculty of Science
Academic Unit	School of Computer Science Human-Computer Interaction
Degree	Master of Arts
Title	Human-Computer Interaction

Program Requirements

Program Requirements

The HCI program comprises 5.0 credits of which 2.5 credits are devoted to course work, and 2.5 credits to a thesis.

Every student must enrol in one of three streams, Master of Arts, Master of Applied Science, or Master of Computer Science, depending on their native discipline.

M.A. Human-Computer Interaction (5.0 credits)

Requirements:

- | | | |
|--|--|-----|
| 1. 0.5 credit in: | | 0.5 |
| HCIN 5100 [0.5] | Fundamentals of HCI Design and Evaluation | |
| 2. 0.5 credit in: | | 0.5 |
| HCIN 5200 [0.5] | Software and User Interface Development | |
| 3. 0.5 credit in: | | 0.5 |
| HCIN 5300 [0.5] | Emerging Interaction Techniques | |
| Students in the M.A. stream must also complete one of the following: | | 0.5 |
| HCIN 5400/CGSC 5101 [0.5] | Experimental Methods and Statistics | |
| HCIN 5403 [0.5] | Research methods in HCI | |
| 4. 0.5 credit from | a wide range of available electives with the guidance and permission of the supervisor of graduate | 0.5 |

studies

5. 2.5 credits in:

2.5

[HCIN 5909](#) [2.5]

Thesis in Human-Computer Interaction

Total Credits

5.0

New Resources

Summary

Delete reference to MA HCI

Rationale for change

Rename degree to Master of Human-Computer Interaction and delete MA and MASc in Human-Computer interaction. Rationale for change The recent (completed November 2020) Cyclical Review of the Human-Computer Interaction (HCI) programs suggested the unification of the three versions of the Master degree in (the Master of Arts, Master of Applied Science, and the Master of Computer Science) into one degree. There is widespread agreement for having a single degree, principally because having three degrees creates unnecessary confusion for applicants. Merging the degrees was agreed several years ago and proposed to FGPA. The three programs only differ by one research methods course. In a unified program, thesis supervisors could instead that recommend which research methods course is most appropriate for the student. However, while we feel a single degree will simplify some aspects, it will not by itself address issues arising from the complex governance structure and its implications. Some of these are involved in other recommendations. There are three listed HCI research methods courses: HCIN5400/CGSC 5101 (Experimental Methods and Statistics), HCIN5403 (Research methods in HCI), and HCIN5404/IDES 5102 (Design Research Methods). The three degrees only differ in requirements for one research methods course (MA: HCIN5400 or HCIN5403; MASc: HCIN5403 or HCIN5404; MCS: HCIN5400 or HCIN5403 or HCIN5404). It confuses applicants that there are three almost-identical degrees. Moreover, the most suitable research method course ought to depend more on the specific research topic rather than the degree name. Therefore, this change will remove confusion for students, and allow a research methods course that is more appropriate to the thesis topic. The MCS allows the courses for either the MA or the MASc, so the simplest route is to preserve the structure of the MCS and delete the other two degrees. We therefore propose to rename the MCS (HCI) to MHCI (Master of Human-Computer Interaction) and delete the MA and MASc. We will modify the admissions requirements for the new degree to be as inclusive as any of the three current degrees.

Transition/Implementation

In-program students will have the choice to stay with what they started, or change to the MHCI.

Program reviewer comments

sandrabauer (09/21/21 8:22 pm): Added transition statement per R.Biddle.

Key: 1025

New Course Proposal

Date Submitted: 09/08/21 1:53 pm

Viewing: **PECO 5904 : Placement in Political Economy**

Last edit: 09/08/21 1:53 pm

Changes proposed by: sandrabauer

Programs referencing this course [Political Economy - related courses list](#)
[Graduate Diploma in Work and Labour \(Types 2 and 3\).](#)

In Workflow

1. PECO ChairDir GR
2. PA Dean
3. GRAD Dean
4. PRE GRAD FCC
5. GRAD FCC
6. GRAD FBoard
7. PRE SCCASP
8. SCCASP
9. SQAPC
10. Senate
11. Banner

Approval Path

1. 08/18/21 11:04 am
Justin Paulson
(justinpaulson):
Approved for PECO
ChairDir GR
2. 09/08/21 1:52 pm
Sandra Bauer
(sandrabauer): Rollback
to Initiator
3. 09/08/21 1:56 pm
Sandra Bauer
(sandrabauer): Approved
for PECO ChairDir GR
4. 09/13/21 11:06 am
David Mendeloff
(davidmendeloff):
Approved for PA Dean
5. 09/24/21 3:46 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD Dean
6. 09/24/21 4:12 pm
Sandra Bauer
(sandrabauer): Approved
for PRE GRAD FCC
7. 10/12/21 1:09 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD FCC
8. 10/20/21 10:47 am
Sandra Bauer
(sandrabauer): Approved
for GRAD FBoard

Effective Date	2022-23
Workflow	majormod
New Resources	No New Resources
Level	Graduate
Course Code	PECO
Course Number	5904
Title	Placement in Political Economy
Title (short)	Placement in Political Economy
Faculty	Faculty of Public Affairs
Academic Unit	Institute of Political Economy
Credit Value	0.50
Significant Experiential Learning	Practica or Placements (including Clinical Placements)
Course Description	Course participants earn credit by contributing to organizations engaged in research, policy, and advocacy activities related to IPE. Students will have opportunities to participate in and contribute to the mission of their placement organizations, develop professional skills, and reflect on career goals.
Prerequisite(s)	permission of the Institute. Completion of PECO 5002 and completion or concurrent registration in PECO 5503/5504 for Work in Labour students. For all other IPE students, completion of PECO 5000 and at least one elective.
Class Format	
Precluded Courses	PECO 5907
Also listed as	
Piggybacked Courses	
U Ottawa Code	
Grade Mode	Satisfactory/Unsatisfactory
Schedule Type	*Field Placement *May constitute a major modification under Carleton's IQAP. Please consult https://carleton.ca/viceprovost/major-minor-modifications/ for more details.
Unpaid Placement	Yes
Summary	adding new course
Rationale for new	we are changing PECO 5907 to PECO 5904 as we are removing the grading aspect. course will now

course	be SAT/UNS rather than graded.
Course reviewer comments	sandrabauer (09/08/21 1:52 pm): Rollback: Rolling back to change to major mod per OVP. No action required on your part. sandrabauer (09/08/21 1:56 pm): Approved for PECO after resubmitting as a majormod per OVP

Key: 10286

[Preview Bridge](#)

A deleted record cannot be edited

Course Delete Proposal

Date Submitted: 09/08/21 1:54 pm

Viewing: **PECO 5907 : Placement in Political Economy**

Last approved: 03/27/19 3:10 am

Last edit: 09/08/21 1:54 pm

Changes proposed by: sandrabauer

Calendar Pages referencing this course	Political Economy Political Economy_(PECO) Work and Labour
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In Workflow

1. PECO ChairDir GR
2. PA Dean
3. GRAD Dean
4. PRE GRAD FCC
5. GRAD FCC
6. GRAD FBoard
7. PRE SCCASP
8. SCCASP
9. SQAPC
10. Senate
11. Banner

Approval Path

1. 08/18/21 11:04 am
Justin Paulson
(justinpaulson):
Approved for PECO
ChairDir GR
2. 09/08/21 1:53 pm
Sandra Bauer
(sandrabauer): Rollback
to Initiator
3. 09/08/21 1:57 pm
Sandra Bauer
(sandrabauer): Approved
for PECO ChairDir GR
4. 09/13/21 11:06 am
David Mendeloff
(davidmendeloff):
Approved for PA Dean
5. 09/24/21 3:46 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD Dean
6. 09/24/21 4:12 pm
Sandra Bauer
(sandrabauer): Approved
for PRE GRAD FCC
7. 10/12/21 1:09 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD FCC
8. 10/20/21 10:47 am
Sandra Bauer
(sandrabauer): Approved
for GRAD FBoard

History

1. Mar 27, 2019 by Mike
Labreque (mikelabreque)

Effective Date	2022-23
Workflow	majormod minormod
Level	Graduate
Course Code	PECO
Course Number	5907
Title	Placement in Political Economy
Title (short)	Placement in Political Economy
Faculty	Faculty of Public Affairs
Academic Unit	Institute of Political Economy
Credit Value	0.50
Significant Experiential Learning	Practica or Placements (including Clinical Placements)
Course Description	This course offers an opportunity to earn academic credit by engaging in research activities under the supervision of professional researchers in the community. Placement possibilities may be initiated by the student or arranged through community contacts established by the Institute of Political Economy.
Prerequisite(s)	permission of the Director.
Class Format	
Precluded Courses	
Also listed as	
Piggybacked Courses	
U Ottawa Code	
Grade Mode	Standard Letter Grade
Schedule Type	*Field Placement
	*May constitute a major modification under Carleton's IQAP. Please consult https://carleton.ca/viceprovost/major-minor-modifications/ for more details.
	No

Unpaid Placement

Summary	delete PECO 5907
Rationale for deactivation	course is being changed to UNS/SAT grading and updating course description to better reflect course content.
Course reviewer comments	<p>sandrabauer (09/08/21 1:53 pm): Rollback: Rolling back to change to major mod per OVP. No action required on your part.</p> <p>sandrabauer (09/08/21 1:57 pm): Approved for PECO after resubmitting as a majormod per OVP</p>

Key: 6285

[Preview Bridge](#)

New Course Proposal

Date Submitted: 09/08/21 1:54 pm

Viewing: **PECO 5905 : Reflective Practice in Work and Labour**

Last edit: 09/08/21 1:54 pm

Changes proposed by: sandrabauer

Programs referencing this course [Political Economy - related courses list](#)
[Graduate Diploma in Work and Labour \(Types 2 and 3\).](#)

In Workflow

1. PECO ChairDir GR
2. PA Dean
3. GRAD Dean
4. PRE GRAD FCC
5. GRAD FCC
6. GRAD FBoard
7. PRE SCCASP
8. SCCASP
9. SQAPC
10. Senate
11. Banner

Approval Path

1. 08/18/21 11:04 am
Justin Paulson
(justinpaulson):
Approved for PECO
ChairDir GR
2. 09/08/21 1:53 pm
Sandra Bauer
(sandrabauer): Rollback
to Initiator
3. 09/08/21 1:56 pm
Sandra Bauer
(sandrabauer): Approved
for PECO ChairDir GR
4. 09/13/21 11:06 am
David Mendeloff
(davidmendeloff):
Approved for PA Dean
5. 09/24/21 3:46 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD Dean
6. 09/24/21 4:12 pm
Sandra Bauer
(sandrabauer): Approved
for PRE GRAD FCC
7. 10/12/21 1:09 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD FCC
8. 10/20/21 10:47 am
Sandra Bauer
(sandrabauer): Approved
for GRAD FBoard

Effective Date	2022-23
Workflow	majormod
New Resources	No New Resources
Level	Graduate
Course Code	PECO
Course Number	5905
Title	Reflective Practice in Work and Labour
Title (short)	Reflect. Practice Work&Labour
Faculty	Faculty of Public Affairs
Academic Unit	Institute of Political Economy
Credit Value	0.50
Significant Experiential Learning	Practica or Placements (including Clinical Placements)
Course Description	This course is designed for students already engaged as staff or active volunteers in unions or other work- and labour-focused community organizations. Written work and discussion offers a space to reflect on questions of strategy, organization, and analysis relevant to their organization's mission.
Prerequisite(s)	Prerequisite(s): PECO 5002 and completion or concurrent registration in PECO 5503 or 5504 and permission of the Institute.
Class Format	unscheduled
Precluded Courses	PECO 5906
Also listed as	
Piggybacked Courses	
U Ottawa Code	
Grade Mode	Satisfactory/Unsatisfactory
Schedule Type	*Practicum *May constitute a major modification under Carleton's IQAP. Please consult https://carleton.ca/viceprovost/major-minor-modifications/ for more details.
Unpaid Placement	No
Summary	adding course
Rationale for new course	we are changing PECO 5906 to PECO 5905 as we are removing the grading aspect. course will now be SAT/UNS rather than graded.

Course reviewer comments	sandrabauer (09/08/21 1:53 pm): Rollback: Rolling back to change to major mod per OVP. No action required on your part.
	sandrabauer (09/08/21 1:56 pm): Approved for PECO after resubmitting as a majormod per OVP

Key: 10287

[Preview Bridge](#)

A deleted record cannot be edited

Course Delete Proposal

Date Submitted: 09/08/21 1:55 pm

Viewing: **PECO 5906 : Reflective Practice on Work and Labour**

Last approved: 04/22/20 3:06 am

Last edit: 09/08/21 1:55 pm

Changes proposed by: sandrabauer

Calendar Pages referencing this course	Political Economy Political Economy_(PECO) Work and Labour
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In Workflow

- 1. PECO ChairDir GR
- 2. PA Dean
- 3. GRAD Dean
- 4. PRE GRAD FCC
- 5. GRAD FCC
- 6. GRAD FBoard
- 7. PRE SCCASP
- 8. SCCASP
- 9. SQAPC
- 10. Senate
- 11. Banner

Approval Path

- 1. 08/18/21 11:04 am
Justin Paulson
(justinpaulson):
Approved for PECO
ChairDir GR
- 2. 09/08/21 1:53 pm
Sandra Bauer
(sandrabauer): Rollback
to Initiator
- 3. 09/08/21 1:57 pm
Sandra Bauer
(sandrabauer): Approved
for PECO ChairDir GR
- 4. 09/13/21 11:06 am
David Mendeloff
(davidmendeloff):
Approved for PA Dean
- 5. 09/24/21 3:46 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD Dean
- 6. 09/24/21 4:12 pm
Sandra Bauer
(sandrabauer): Approved
for PRE GRAD FCC
- 7. 10/12/21 1:09 pm
Sandra Bauer
(sandrabauer): Approved
for GRAD FCC
- 8. 10/20/21 10:47 am
Sandra Bauer
(sandrabauer): Approved
for GRAD FBoard

History

1. Apr 22, 2020 by Sandra Bauer (sandrabauer)

Effective Date	2022-23
Workflow	majormod minormod
Level	Graduate
Course Code	PECO
Course Number	5906
Title	Reflective Practice on Work and Labour
Title (short)	Reflect. Practice Work&Labour

Faculty	Faculty of Public Affairs
Academic Unit	Institute of Political Economy
Credit Value	0.50
Significant Experiential Learning	Practica or Placements (including Clinical Placements)
Course Description	Through a reflection on their current work environment, it is expected that students that are working would apply the knowledge received to enrich their work place. Students will provide relevant reflections and proposals to enrich their work-practices over the period of one-semester.
Prerequisite(s)	PECO 5002 and permission of the department.
Class Format	
Precluded Courses	
Also listed as	
Piggybacked Courses	
U Ottawa Code	

Grade Mode	Standard Letter Grade
Schedule Type	*Practicum *May constitute a major modification under Carleton's IQAP. Please consult https://carleton.ca/viceprovost/major-minor-modifications/ for more details.
Unpaid Placement	Yes

Summary	remove PECO 5906
Rationale for deactivation	we are changing the grading for the course to SAT/UNS and updating the language to better reflect the course.
Course reviewer comments	nataliephelan (08/25/21 11:13 am): Changed effective date to 22-23, as this is the calendar edition from which the course will be removed. sandrabauer (09/08/21 1:53 pm): Rollback: Rolling back to change to major mod per OVP. No action required on your part. sandrabauer (09/08/21 1:57 pm): Approved for PECO after resubmitting as a majormod per OVP

Key: 9667

[Preview Bridge](#)