

**APPROVED BY SENATE**  
**10/18/2021**

# : **ADVANCED DESIGN THINKING, CERT**

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## **In Workflow**

1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1526 Head (mpokorny@illinois.edu)
3. KR Dean (nicturn@illinois.edu; mmedward@illinois.edu)
4. University Librarian (jpwilkin@illinois.edu)
5. Grad\_College (agrindly@illinois.edu; lowry@illinois.edu)
6. Provost (kmartens@illinois.edu)
7. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
8. Senate (jtempel@illinois.edu)
9. U Senate Conf (none)
10. Board of Trustees (none)
11. IBHE (none)
12. HLC (kmartens@illinois.edu)
13. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

## **Approval Path**

1. Wed, 21 Apr 2021 19:52:37 GMT  
Deb Forgacs (dforgacs): Approved for U Program Review
2. Thu, 22 Apr 2021 00:47:31 GMT  
Melissa Pokorny (mpokorny): Approved for 1526 Head
3. Fri, 28 May 2021 15:15:06 GMT  
Nicole Turner (nicturn): Approved for KR Dean
4. Fri, 28 May 2021 15:16:39 GMT  
John Wilkin (jpwilkin): Approved for University Librarian
5. Fri, 10 Sep 2021 21:20:26 GMT  
Allison McKinney (agrindly): Approved for Grad\_College
6. Mon, 13 Sep 2021 19:20:10 GMT  
Kathy Martensen (kmartens): Approved for Provost

## **New Proposal**

Date Submitted: Tue, 20 Apr 2021 16:26:21 GMT

## **Viewing:: Advanced Design Thinking, CERT**

Changes proposed by: Nicole Turner

## **Proposal Type**

### **Proposal Type:**

Major (ex. Special Education)

## **Administration Details**

### **Official Program Name**

Advanced Design Thinking, CERT

### **Sponsor College**

Fine & Applied Arts

**Sponsor Department**

Art and Design

**Sponsor Name**

Alan Mette

**Sponsor Email**

amette@illinois.edu

**College Contact**

Nicole Turner

**College Contact Email**

nicturn@illinois.edu

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

No

**Proposal Title****Effective Catalog Term**

Fall 2022

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

Establish the Campus Graduate Certificate in Advanced Design Thinking

**Summary:**

Design thinking is the human-centered approach to design and innovation which considers all aspects of the relationship between people and the products, services and experiences that they encounter. It is based on the methodologies long used by Industrial designers and extends these into application by other disciplines to best answer human needs by design interventions.

The program would provide a self-standing professional qualification in design thinking which would be of value for students with undergraduate degrees in design and also for students with degrees in a variety of related subjects including Engineering, Business and Computing. The Certificate would also be attractive for mid-career professionals from all those disciplines.

The Certificate shares courses with the long established and reputable UIUC MFA in Art + Design, concentration in Industrial Design ( MFA ID ) and graduates from the Certificate could apply for advanced entry into that program. The proposal leverages existing courses taught by existing faculty within the MFA ID program. Entry to the Certificate would not require a previous design degree for suitably motivated individuals but progression into the MFA may require some additional skill development courses for those individuals.

## Program Justification

Provide *abrief* justification of the program, including highlights of the program objectives, and the careers, occupations, or further educational opportunities for which the program will prepare graduates, when appropriate.

This proposal seeks the approval for a Campus Graduate Certificate in Advanced Design Thinking. The program will enable students to engage in the theory and practice of design thinking as used in human-centered design. Traditionally design thinking formed the basis of studio design practice in Industrial Design (ID) and other design disciplines but it has gained popularity in recent years as a practice with a high level of transferability and applications in many other situations in business and society. It is now utilized in K12 education and Fortune 500 companies alike as a way to better understand and provide for human needs and wants. The program will give experience in the utilization of design thinking at a high level, applicable to students with an undergraduate degree in design as well as students from other disciplines who want to expand their professional horizons.

The Certificate is designed for both groups to develop skills in identifying and resolving design opportunities. It is an intensive full time studio experience for one semester which puts students alongside design students on the MFA ID program. The Certificate is based on the first two in-person courses from the MFA program, each 8 weeks long and run consecutively in the fall term only (16 total weeks), taught by existing graduate faculty. Students will be allocated space in the ID Graduate studio for two days/ week with access to the Schools facilities and Workshops. Completion of the Certificate enables advanced entry (if admitted) to the MFA ID program for students who perform well, counting for 12 hours of credit in that program. The mixed cohort will also bring an increased element of interdisciplinarity to the existing MFA program.

For our ID graduate program we use a model of the human-centered design process which is based on a six step sequence....Inquiry, Insight, Ideation, Involvement, Implementation and Informing. The program is pre-dominantly project based with a mixture of individual and group working. The first course ARTD 501 explores the design process from inquiry to ideation, and the second course ARTD 502 deals with the development from ideation to implementation. The two courses will be run consecutively, each involving 12 hours of studio activity per week over an eight week period.

Individuals who graduate with the Certificate will be able to capitalize on enhanced professional opportunities, in the design field or in broader business or social ventures. If they decide to continue into higher level graduate studies in design, that will expand recruitment into the Universities existing provision in that area. The Certificate also provides an advanced study opportunity for UIUC students who are taking the various introductory design thinking courses now available in the University. The transformative effect on the University and the surrounding community can be significant.

Whilst we imagine the initial provision will be in on-campus study, there are future possibilities for on-line synchronous and asynchronous learning.

## 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 this new program/proposed change result in the replacement of another program?

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).

At the end of the program, you should demonstrate the following at an initial Postgraduate level

Research...the ability to select and use appropriate research and experimental methods, to access existing data sources or to generate new data, to analyze and draw insights for future work, with particular emphasis on identifying human needs,

Creative synthesis...the ability to produce meaningful creative proposals from investigation, or in response to identified opportunities or requirements, using appropriate design thinking, modelling and making strategies, taking account of users, audience, market needs, makers, producers or exhibitors, reconciling diverse perspectives in coherent design solutions,

Production...the ability to select and use appropriate production processes in the design process with an understanding of the potential of new technologies and the critical importance of sustainability,

Contextualization...the ability to understand the multiple contexts of design practice, including the historical, theoretical, critical, social, professional, cultural, environmental and technological contexts,

Communication...the ability to use various forms of communication as appropriate during and on completion of the work process, to elicit information, to explain, to debate and persuade, adapting to audience and situations,

Organization....the ability to plan and implement action, identifying targets and organizing resources, effectively managing self and others, including team building and team working skills,

Learning...the ability to carry out independent learning as a basis for academic study, lifelong learning and for personal professional development, including the ability to reflect and independently evaluate your own practice, with the aim of improvement.

For our graduate programs we use a model of the human-centered design process which is based on a six step sequence....Inquiry, Insight, Ideation, Involvement, Implementation and Informing. The program is pre-dominantly project based with a mixture of individual and group working. The first two courses in the MFA sequence de-construct the design thinking process for study, making these courses appropriate for both design graduates and students from other disciplines.

ARTD 501 From Inquiry to Ideation

After a short benchmarking exercise to determine your current level of design skills, this course focuses on the first stages of design thinking using research and analysis to determine user needs and going on to ideation and creative thinking strategies to respond to those needs.

ARTD 502 From Involvement to Implementation

This course continues to include user involvement for feedback, and the utilization of prototyping of design proposals to produce resolved design solutions. Due consideration will be given to responsible and sustainable manufacturing. Additionally we will consider communication strategies involving users and other stakeholders.

**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.**

**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.**

The Graduate Certificate in Advanced Design Thinking provides an intensive introduction to the use of high-level design thinking in human centered design practice. Design thinking is now widely recognized as having application across a broad spectrum of professional, industrial, business and social sectors.

The Campus Graduate Certificate provides a project based practical experience in the application of design thinking methodologies in researching human needs and generating design proposals in response to identified opportunities. You will use a variety of research, analysis, ideation, prototyping and communication techniques in these projects.

The program involves study alongside students in the Master of Fine Arts in Art + Design, concentration in Industrial Design and forms the bulk of the first semester of that program. This enables students who graduate from the Campus Graduate Certificate in Advanced Design Thinking to use those credits towards an MFA ID or other graduate qualification in Industrial Design.

Students who have successfully completed this certificate may use the certificate to satisfy the following degree requirements, provided they apply and are admitted to the degree program:

12 hours of required studio coursework for the Master of Fine Arts in Art + Design, concentration in Industrial Design.

#### **Statement for Programs of Study Catalog**

<b>Code</b>	<b>Title</b>	<b>Hours</b>
ARTD 501	Industrial Design I	6
ARTD 502	Industrial Design II	6
Total Hours		12

#### **Corresponding Degree**

CERT Campus Graduate Certificate

## **Program Features**

#### **Academic Level**

Graduate

#### **Does this major have transcribed concentrations?**

No

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

16 weeks

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

12

#### **What is the required GPA?**

2.75

**CIP Code**

500404 - Industrial and Product Design.

**Is This a Teacher Certification Program?**

No

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

No

**Delivery Method****This program is available:**

On Campus - Students are required to be on campus, they may take some online courses.

**Institutional Context**

University of Illinois at Urbana-Champaign

Describe the historical and university context of the program's development. Include a short summary of any existing program(s) upon which this program will be built.

**Explain the nature and degree of overlap with existing programs and, if such overlap exists, document consultation with the impacted program's home department(s).**

The University of Illinois recently approved campus graduate certificates in order to reach a new population of learners.

The Certificate in Advanced design thinking will leverage existing coursework to expand access to the MFA ID graduate program for people who are not in a position at this point to commit to two or three years of advanced study. For existing UIUC students in a variety of disciplines, it will provide an introduction to this study area which they can build on in the future as their interests and careers develop. It will also expose MFA ID students to a broader academic community.

The MFA ID program was started some 120 years ago and is one of the top design graduate programs in the country according to Design Intelligence. This development leverages this reputation and will facilitate an expansion in recruitment of self-funded students.

Faculty from the MFA ID program are actively engaged with other entities across the campus including the Gies College of Business, Technology Entrepreneur Center, and the Siebel Center for Design. There has been much recent development of design thinking at the undergraduate level and this proposal capitalizes on that raised awareness. Courses offered by ID and FAA faculty which include design thinking are all the courses in the ARTD rubric and also ARTD/TEC 230 Design thinking/ needfinding, ARTD 501 Inquiry to ideation, ARTD 502 Involvement to Implementation, SE 402 Computer aided product development, ART 310, FAA 102, BADM 366 Product development and others.

University of Illinois

**Briefly describe how this program will support the University's mission, focus and/or current priorities. Demonstrate the program's consistency with and centrality to that mission.**

This program responds directly to Campus Strategic Plan Goal 2C: "Provide new educational pathways and enhance current programs to increase flexibility and to foster education across disciplines". The Certificate in Advanced design thinking will expand access to University of Illinois credentials in three ways; 1. A new market of students can obtain a standalone credential, 2. current students across campus can gain a complimentary credential, 3. It provides a new pathway to graduate degree programs.

## Admission Requirements

### Desired Effective Admissions Term

Fall 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.**

Prospective applicants must apply for admission to the Campus Graduate Certificate specifically through the Graduate College admissions process. Graduate and professional admissions minimum requirements will apply - <https://grad.illinois.edu/admissions/apply/requirements>.

Admission requirements are an undergraduate degree in Industrial design or a related area. This would include other design areas, Architecture, Engineering, Entrepreneurship, areas of Computer Science and Business. Admissions and student advising would be handled alongside applications to the existing MFA ID graduate program. Some applicants may be re-directed to the Certificate as a more appropriate educational opportunity than the MFA at this point in their careers. There would be an additional advising load for students with appropriate grade performance who wish to transfer into the MFA ID program on completion of the Certificate.

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

Current academic and administrative staff in the School of Art and Design have the experience to act as advisors, maintain records and process student registration in the Certificate.

## Enrollment

### Number of Students in Program (estimate)

#### Year One Estimate

15

#### 5th Year Estimate (or when fully implemented)

25

### Estimated Annual Number of Degrees Awarded

#### Year One Estimate

10

#### 5th Year Estimate (or when fully implemented)

25

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

Fall

## Budget

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

No

### Additional Budget Information

A student registered in ARTD 501 and ARTD 502 will be assessed a \$95 facility use fee for the one-semester certificate program (total fees: \$95).

## Financial Resources

How does the unit intend to financially support this proposal?

Current instructional staff in the School will offer and instruct the courses. Should demand for this Campus Graduate Certificate exceed expectations, new faculty may be recruited to help teach the courses. Funding for these additional faculty will come from the additional financial resources generated by fee paying students in this program.

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

No

### Attach letters of support

FAA SS CERT Form.pdf

Is this program requesting self-supporting status?

Yes

## 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.

## 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.

The proposed courses in this Campus Graduate Certificate are already taught by current faculty. We therefore do not expect there to be any additional impact on faculty resources, class size, teaching loads, or ratios. The existing courses in the MFA ID run with small numbers so there is scope for expansion without impacting faculty workloads significantly

Should demand for this Campus Graduate Certificate exceed expectations, additional faculty may be required to support larger course sizes and to maintain existing teaching loads and student-faculty ratios. We will be using previously authorized faculty for this staffing. If growth exceeds expectations, additional faculty hires may be requested accordingly.

## 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.

Those admitted to this Campus Graduate Certificate will take existing courses where library resources are currently sufficient.

## Market Demand

What market indicators are driving this proposal? If similar programs exist in the state, describe how this program offers a unique opportunity for students:

The demand for non-degree Graduate qualifications continues to increase as both recent graduates and working professionals look for up-skill and development opportunities without the cost or time commitment of conventional graduate programs. Recent reports indicate that Certificates have risen to 22% of postsecondary credentials awarded.

This Certificate would provide skill development to learners who are not interested or unable to complete a regular degree program at this point in their careers

There are established programs at IIT School of Design and Northwestern University but not at Certificate level and at considerably higher cost than UIUC.

Due to the increased awareness recently about the value of design thinking in many areas of activity, this is beginning to be reflected in job titles and job opportunities. Many jobs that in the past would have only stressed technical ability now value the ability to empathize with users, to analyze user needs, and to use human-centered design to produce more effective products, services and experiences.

Explain how the program will meet the needs of regional and state employers, including any state agencies, industries, research centers, or other educational institutions that expressly encouraged the program's development.

Discuss projected future employment and or additional educational opportunities for graduates of this program. Compare estimated demand with the estimated supply of graduates from this program and existing similar programs in the state. Where appropriate, provide documentation by citing data from such sources as employer surveys, current labor market analyses, and future workforce projections.

*(Whenever possible, use state and national labor data, such as that from the Illinois Department of Employment Security at <http://ides.illinois.gov/> and/or the U.S. Bureau for Labor Statistics at <http://www.bls.gov/>).*

The expectation is that most applicants will be seeking career advancement opportunities. The development of their design thinking abilities in the Certificate program will provide learners with the knowledge and skills necessary to create and exploit many opportunities for improved design. Research shows the top reason learners choose a graduate certificate is a quick return on their investment that will potentially yield opportunities for salary increases, an expanded professional network, and basic preparation for a future graduate degree program.

This Graduate Certificate would provide benefit to the students that it serves and to the State of Illinois at large. The employees, the Illinois workforce, and employers will benefit from the development of improved design thinking skills. The certificate program will also attract learners who could later return to the University for a graduate degree program. The attraction of the Certificate also extends to International students who currently form the bulk of the MFA ID program which has a very high application rate ( 70-100 applicants for 6-10 places ). International students are able to get study visas for the Certificate.

#### **What resources will be provided to assist students with job placement?**

At this time, specific resources to assist with job placement are not planned. Given the graduate level format of this content and the broad target audience, students are likely to be able to navigate job placement and career growth opportunities independently.

## **EP Documentation**

#### **EP Control Number**

EP.22.012


#### **This proposal requires HLC inquiry**

No

## **DMI Documentation**

Key: 1058

# Graduate College Request & Justification Form for Program Classification (if needed)

 The Graduate College | University of Illinois at Urbana-Champaign

**REQUEST & JUSTIFICATION FORM FOR PROGRAM CLASSIFICATION  
TRADITIONAL, SELF-SUPPORTING or REIMBURSABLE**

**CURRENT PROGRAMS**  
Current graduate programs can request a change in classification to Traditional or Reimbursable, but not to Self-supporting

**NEW PROGRAMS**  
New programs seeking Traditional classification do not need to complete this form.

New programs seeking Self-supporting classification should be aware of the following

- a) Students enrolled in Self-supporting programs are ineligible to hold waiver-generating appointments. NOTE: There is no mechanism within the Human Resources Front End system that restricts the appointment of a Self-supporting program student to an assistantship. Therefore, if a unit (faculty or staff) appoints a student, in error, significant problems result for everyone involved.
- b) Self-supporting status results in reduced flexibility for the program. Even if a student in the program is most qualified for a particular assistantship appointment and financing is available through the program, the program status makes the student ineligible.
- c) Because Traditional, Reimbursable and Self-supporting programs each yield 90% of net tuition, and the Reimbursable classification avoids the limitations above, a program might find the Reimbursable classification more advantageous than Self-supporting.

Please contact the Fellowship Office at the Graduate College if you have questions or seek clarifications, (217) 333-0036 or gradfellowshps@illinois.edu

**COLLEGE OR SCHOOL:** School of Art + Design

**IS THIS A NEW OR EXISTING PROGRAM:**  
 New Program  
 Existing Program      Program Code \_\_\_\_\_ Current Classification \_\_\_\_\_

**REQUESTED CLASSIFICATION:**  TRADITIONAL     REIMBURSABLE     SELF-SUPPORTING

**JUSTIFICATION: On a separate sheet, please address the following.**

1. Describe the reasons for this request and explain: (a) the pros and cons of the classification requested, and (b) how the requested classification will benefit and not adversely affect the academic quality of the program.
2. Describe the expected impact of the requested classification to new students. How will these measures affect the affordability of the program? What type of financial aid, if any, will be offered? Note: Continuing students will not be affected as they are subject to the rules in effect at the time of their admission.
3. What provisions will be made to communicate the implications of the classification to prospective and newly admitted students?
4. Name the college and program contact persons in charge of implementing and communicating the classification and its consequences to students.

**Unit Head Signature and Date** Alan T. Mott      Date 9/10/21

**College Dean Signature and Date** Kevin Hamilton      Date 09/10/21

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June 2014 Page 1  
Alison Mokiany 9/10/21

**1) Describe the reasons for this request and explain: (a) the pros and cons of the classification requested, and (b) how the requested classification will benefit and not adversely affect the academic quality of the program.**

This Campus Graduate Certificate (CGC) is comprised of two existing courses in the Master of Fine Art degree in Art + Design, Industrial design concentration (MFA ID). This certificate will serve additional students who

may not be planning to enter the MFA ID program, but are willing to enroll in a self-supporting graduate certificate which has value as a professional qualification

- a) This population of learners could include recent bachelor's degree earners in Art + Design or other fields such as Engineering, Business, CS, and Entrepreneurship, who are seeking a professional qualification prior to entering the job market or who may be considering a graduate program in the future. Learners who pursue a CGC in Advanced Design Thinking may pursue a School of Art + Design MFA ID in the future and will be allowed to count these credits toward the degree. The primary audience that will be impacted by this self-supporting classification are tuition waiver eligible employees; however, it is quite uncommon for tuition waiver eligible employees to join the MFA program as it requires full-time enrollment. Additionally, students who may later enter the MFA program would have not had access to a graduate assistantship or fellowship while in the CGC, but the flexibility of earning a credential before committing to the MFA is worthwhile and still justifies the self-supporting value the program would bring.
- b) This program provides access to academic graduate coursework to earn a transcriptable credential in only one semester, expanding their preparation for various professional opportunities. Non-traditional students served by this self-supporting program would enrich the MFA learning communities through their unique experiences and goals. This program also has the potential to generate resources for the School of Art + Design which would benefit all students.

**2) Describe the expected impact of the requested classification to new students. How will these measures affect the affordability of the program? What type of financial aid, if any, will be offered? Note: Continuing students will not be affected as they are subject to the rules in effect at the time of their admission.**

New students enrolled in the proposed CGC with self-supporting status will be eligible for financial aid.

If funds are available (at the discretion of the Dean) a limited amount of merit or need based scholarships may be offered to qualified applicants to help retain a high-quality and diverse population.

**3) What provisions will be made to communicate the implications of the classification to prospective and newly admitted students?**

Students in the proposed CGC are not eligible for graduate assistantships and fellowships. Implications of self-supporting status, including tuition rate and financial aid eligibility, will be communicated to prospective students via the program's website and other communications throughout the recruiting and admissions process.

**4) Name the college and program contact persons in charge of implementing and communicating the classification and its consequences to students.**

Alan Mette, Director of the School of Art + Design

Ellen de Waard, Coordinator of Graduate Academic Affairs in the School of Art + Design

Nicole Turner, Assistant Dean of Academic Programs & International Education in the College of Fine + Applied Arts