

New Proposal

Date Submitted: 11/04/22 12:27 pm

Viewing: **: Industrial Design, MDes**

Last edit: 01/09/23 8:38 am

Changes proposed by: Nicole Turner

In Workflow

1. **U Program Review**
2. **1526 Head**
3. **KR Dean**
4. **University Librarian**
5. **Grad_College**
6. **Provost**
7. **Senate EPC**
8. Senate
9. U Senate Conf
10. Board of Trustees
11. IBHE
12. HLC
13. DOE
14. DMI

Approval Path

1. 11/04/22 12:29 pm
Deb Forgacs
(dforgacs):
Approved for U Program Review
2. 11/04/22 2:02 pm
Melissa Pokorny
(mpokorny):
Approved for 1526 Head
3. 11/04/22 3:01 pm
Nicole Turner
(nicturn):
Approved for KR Dean
4. 11/04/22 3:21 pm
John Wilkin
(jpwilkin):
Approved for University Librarian
5. 11/09/22 3:56 pm
Mary Lowry

- (lowry): Rollback to KR Dean for Grad_College
- 6. 11/10/22 8:01 am
Nicole Turner
(nicturn):
Approved for KR Dean
- 7. 11/10/22 9:03 am
John Wilkin
(jpwilkin):
Approved for University Librarian
- 8. 12/05/22 2:45 pm
Allison McKinney
(agrindly):
Approved for Grad_College
- 9. 12/14/22 7:43 am
Brooke Newell
(bsnewell):
Approved for Provost

Proposal Type

Proposal Type:
Major (ex. Special Education)

Administration Details

Official Program Name	Industrial Design, MDes	
Diploma Title	Master of Design in Industrial Design	
Sponsor College	Fine & Applied Arts	
Sponsor Department	Art and Design	
Sponsor Name	David Weightman	
Sponsor Email	diw@illinois.edu	
College Contact	Nicole Turner	College Contact Email
	nicturn@illinois.edu	
College Budget Officer	Greg Anderson	

College Budget gnanders@illinois.edu
Officer Email

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

KR Dean

Does this program have inter-departmental administration?

No

Proposal Title

Effective Catalog Fall 2023
Term

Proposal Title (either Establish/Revise/Eliminate the Degree Name in Program Name in the College of XXXX, i.e., Establish the Bachelor of Science in Entomology in the College of Liberals Art and Sciences, include the Graduate College for Grad Programs)

Establish the Master of Design in Industrial Design in the College of Fine and Applied Arts and the Graduate College

Does this proposal have any related proposals that will also be revised during the next 6 weeks? Consider Majors, Minors, Concentrations & Joint Programs in your department. Please know that this information is used administratively to move related proposals through workflow efficiently. Example: If you are revising the BS proposal and one related concentration within the next 6 weeks, "This BS proposal (key 567) is related to the Concentration A proposal (key 145)."

This proposal is related to current program 10KS0255MFA : Art & Design: Industrial Design, MFA (key 916) and proposal in workflow for the MDes - Master of Design (key 1153).

Program Justification

Provide a brief 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.

The proposal is to develop a new major in Industrial Design within the new Master of Design (MDes) degree, also submitted for Fall 2023. The proposed MDes Industrial design two year professional degree is to replace the current two year route through the MFA ID program (currently a two and three year route are available, with professionals completing the two year route and preparation for academic careers is the three year route). This better reflects the changing intake to graduate degrees in design which is increasingly oriented towards professional rather than academic careers, both for domestic and international students. It also increases the number of students in graduate classes to more economic levels. For international students it enables STEM designation, which allows for a F-1 visa/Optional Practical Training (OPT) 24 month extension. Changing to a MDes designation better reflects comparisons with other new graduate programs in an expanding sector of professional education.

The MFA in Industrial design is a concentration within the MFA program in the School of Art and Design, established 26 years ago in its latest formation. It has taken various forms over the years and currently exists in two and three year format. The MFA is taken as the terminal qualification in Art and Design and is a pre-requisite for teaching in US Universities. All MFAs are subject to accreditation by the National Association of Schools of Art and Design (NASAD) which determines content, learning objectives and compliance with NASAD standards. NASAD approves two forms of MFA...an academic model 2 or 3 years in duration with pedagogic content and teaching experience, and a professional model usually 2 years in duration which is not expected to include pedagogy or teaching practice. Institutions are required to make it explicit to applicants which kind of MFA they offer. As teaching practice is related to tuition waivers and stipends, which is often a differentiator between the two kinds of programs.

UIUC overcomes this dilemma by making the three year version has the possibility of funding, with students taking on responsibility as teaching assistants, whilst the two year version is self-funded.

In the MDes ID, as was in the MFA ID two-year program, students generally take 16 credit hours a semester and have no assistantship which allows them to complete the program in two years. This is in comparison to the MFA ID three-year program in which students are completing 12 hours a semester and also completing an assistantship (often teaching) to prepare them for academia.

In recent years, limits on the numbers of assistantships and the increase in international students with developing language skills has resulted in a shift towards more students on the two year program with no teaching practice experience and more professional expectations from the program. The replacement of the two year MFA route with the two-year MDes avoids any confusion between the two kinds of MFA and would also enable STEM designation for the program, of particular relevance to international students keen to extend their connection with the USA after graduation.

Relevant course description changes to include MDes are currently in workflow, as of 11-4-22 with no changes in course content or course learning outcomes.

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?

Yes

Please describe:

The two year MFA Art & Design, concentration in Industrial Design (MFA ID) program will no longer be offered. The three year MFA ID program will continue for people who plan an academic career. These two programs have previously shared a program code and catalog requirements, but differed in funding availability and time to degree completion.

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

No

Does the program include other courses/subjects outside of the sponsoring department impacted by the creation/revision of this program?

Yes

Courses outside
of the sponsoring
department/interdisciplinary
departments

Please attach any [MDes ID letter from ARCH.pdf](#)
letters of [MDes ID letter from ENG.pdf](#)
support/acknowledgement
for any
Instructional
Resources
consider faculty,
students, and/or
other impacted
units as
appropriate.

Program Regulation and Assessment

Plan to Assess and Improve Student Learning

Illinois Administrative Code: 1050.30(b)(1)(D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

List the program's student learning outcomes. Each outcome should identify what students are expected to know and/or be able to do upon completing this program.

Learning outcomes for the MDes program:

At the end of the program, you should demonstrate the following....

INQUIRY AND INSIGHT...the ability to select and use appropriate research and experimental methods, to access existing data or to generate new data, to analyze and draw insights, with a particular emphasis on user needs.

IDEATION...the ability to produce creative proposals to identified design opportunities, using design thinking, modelling, and prototyping strategies, with an appropriate integration of functional, technical, ergonomic and visual factors.

IMPLEMENTATION...the ability to select and use appropriate making and manufacturing processes with an understanding of the potential of new technologies, and the demands of sustainability.

INFORMING...the ability to use visual and verbal communication, to explain and persuade, as appropriate for different audiences.

CONTEXTUALISATION...the ability to locate your own activity within the multiple contexts of design practice, including the theoretical, professional, cultural, environmental and technological contexts.

SELF DEVELOPMENT...the ability to carry out independent learning and reflexive evaluation of your work, as well as to plan and implement action, effectively managing self and others.

Describe how, when, and where these learning outcomes will be assessed.

Describe here:

Every ten years, the School of Art and Design undergoes a full curriculum review for re-accreditation by the National Association of Schools of Art and Design (NASAD). The NASAD visitor's report is a useful tool for assessing the strengths of the school's programs, determining areas that need improvement, and strategies for growth and improvement. The last NASAD site visit and review was in April 2022.

In addition, as a NASAD member, the School of Art and Design is asked annually to respond to an accreditation audit, and to submit an affirmation statement. NASAD compliance states that:

"Plan Approval is required after institutional approval and before students are admitted into a new degree program. The application for Plan Approval includes information concerning the structure of the new curriculum as well as data concerning the faculty, library, equipment, and/or resources necessary for its support."

The School of Art and Design uses peer-reviewed book chapters, journal article publication, and peer-reviewed conference presentations as means to assess student performance, communicate the impact of programs, and provide students an emerging dissemination record that will prepare them for their future careers.

Other assessment data used to aid the evaluation of the program:

- Admission numbers disaggregated by race, gender, geography, concentration, and academic year
- Student performance data
- Student participation in study abroad programs
- Graduate research opportunities
- Retention rates and average time to complete the degree
- Student and alumni feedback
- Graduate program exit survey
- Student awards and recognition outside the School of Art and Design
- Job placements
- Alumni Surveys

In addition, the design faculty will regularly discuss the progress of the students at bi-weekly program meetings. The School of Art and Design Program Chairs Committee will review program outcomes beginning three years after the degree admits majors, and every three years thereafter. As part of that process the program has a practice of continuous review and improvement based on student feedback, with professional and industrial feedback from public exhibitions and portfolio review events. In the case of this program the biannual involvement of the External critic is an essential element of this evaluation.

The university's annual learning outcomes assessment plan will serve as an additional point to review both the program's learning outcomes and assessment plan, as well as receive feedback from the Office of the Provost.

Identify faculty expectations for students' achievement of each of the stated student learning outcomes. What score, rating, or level of expertise will signify that students have met each outcome? Provide rating rubrics as necessary.

The major form of student performance assessment will come in grades and feedbacks for assessable components of each course. Those will be clearly articulated in course syllabi and project briefs and discussed with students.

---RATING RUBRIC---

This rubric relates expectations at different performance levels (Excellence/Competence/Developing competence/Base competence).

INQUIRY AND INSIGHT

- Excellence . Comprehensive survey of existing market. Good mix of primary and secondary data sources. Significant number of direct user contacts. Insightful analysis of data and feedback, summarized clearly as a basis for action
- Competence Good survey of existing market. Good use of secondary data, some primary data sources used. Solid attempt to generate primary data. Solid analysis of inquiry data with some useful insights as a basis for future action
- Developing competence Incomplete and narrow study of existing market. Limited use of primary data, mainly secondary data used. Limited or incomplete analysis of inquiry data with few insights as a basis for future action
- Base competence Minimal study of existing market with little primary or secondary data used. Minimal insights with little impact on future actions

IDEATION

- Excellence . Wide range of innovative ideas that directly address insights, well communicated via sketches and models. High level of creativity and originality
- Competence Good range of concept ideas that address insights. Some evidence of creative and innovative approach, communicated in sketches and models
- Developing competence Limited number of design concepts with few illustrations
Some limited evidence of innovation and creativity
- Base competence . Small number of concept designs with little evidence of creativity

IMPLEMENTATION

- Excellence . Excellent development of design concepts into final innovative design proposal, fully resolved in details of implementation, embodied in comprehensive drawings, renderings and models
- Competence. Good development of design concepts into realistic design proposal, with some detail of construction and manufacture, embodied in drawings, renderings and models, showing good level of innovation
- Developing competence Limited evidence of detailed implementation, manufacture and construction
- Base competence . Final proposal is incomplete without much evidence of implementation or innovation

INFORMING

- Excellence . Design proposals and concepts communicated well. Effective use of Powerpoint and video to communicate design outcomes and process. Good oral and written skills evident

- Competence Good use of communication tools to show process and outcomes, including Powerpoint, video, oral and written methods
- Developing competence Design outcomes and process not communicated well using Powerpoint, video, oral and written tools
- Base competence . Rudimentary presentation of outcomes and process, not using the full range of tools available

CONTEXTUALISATION

- Excellence. Comprehensive demonstration of understanding of the social, industrial, professional and cultural contexts in which the design work is located
- Competence. A sound understanding of the contextual location of the design work
- Developing competence. Some understanding of the context of design work
- Base competence. Minimal understanding of the context of design activity

SELF DEVELOPMENT

- Excellence . Active participation in projects, assignments and studio activities. Excellent team working and project organisation skills. Full understanding of professional role and appropriate ethical matters. Excellent learning skills and self reflection
- Developing competence Solid participation in projects and assignments, good team working and organizational skills. Good understanding of professional role and ethical approach. Good learning skills and self reflection
- Competence. Some participation in projects and assignments with some awareness of team working and organizational skills. Some development of learning and self reflection
- Base level Minimal development of team working and organisation skills, with some evidence of learning skills and self reflection

---SYLLABUS EXAMPLE---

Of learning outcomes, their primary or secondary emphasis in course, and projects in which they are demonstrated.

INQUIRY AND INSIGHT: (primary) You will have used a number of research methods to investigate needs and generate insights as a basis for future design work. At least three relevant insights will be required (Project 2 presentation / project report)

IDEATION: (secondary) You will have produced more than 10 initial concept design proposals in response to your insights from research, demonstrating creativity and innovative design thinking, appropriately prototyped and illustrated (presentation / sketches / project report)

IMPLEMENTATION: (secondary) You should demonstrate the ability to select and use appropriate making and manufacturing processes with an understanding of the potential of new technologies, and the demands of sustainability (covered in ARTD 502)

INFORMING: (primary) You will have shown your communication skills in verbal and visual presentations and other communication media (Presentations / project reports)

CONTEXTUALISATION: (primary) In Project 3 your research topic will show how design is located in various professional, historical, market and social contexts (Project 3 presentation / project report)

SELF DEVELOPMENT: (secondary) You will have organized your work on the projects, and written a reflexive self evaluation of your activities (Project 4 journal)

Explain the process that will be implemented to ensure that assessment results are used to improve student learning.

ID faculty are committed to making learning outcomes explicit and transparent, communicated in the simplest way possible and these will form part of course syllabi. At the graduate level, faculty organize an event at the end of every semester where all graduate students will present their semesters work in the program to the faculty, their peers and an External Critic in a one or two day event. This enables faculty to reflect on overall performance with the benefit of an external viewpoint. In addition there is an annual Graduate exhibition in the Krannert Art Museum of all graduating MFA students in the School. During the year there are two external portfolio review events where students present their work to professionals from companies or consultancies, giving a broad external perspective. This is in addition to the NSAD accreditation visits every ten years. A number of faculty are members of NASAD review panels to other institutions. Every year the Industrial Design Society of America organizes a Student Merit award competition for Graduate and Undergraduate students which produces winners from Colleges in each of the IDSAs five Districts. This enables comparisons between peer institutions and in the last few years we have been successful in gaining the Undergraduate student award once and the Postgraduate student award twice. It can be seen that there is a broad range of comparisons of student performance across the board in the discipline.

In addition, the design faculty often discuss the progress of the students at bi- weekly program meetings. The School of Art and Design Program Chairs Committee will review program outcomes beginning three years after the degree admits majors, and every three years thereafter. The university's annual learning outcomes assessment plan will serve as an additional point to review both the program's learning outcomes and assessment plan, as well as receive feedback from the Office of the Provost.

Program

Description and

Requirements

Attach Documents

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/PublicAdminRules2017.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.

Attach Program of

Study-related information such as sample sequences (for undergraduate programs) or college-level forms.

Catalog Page Text - Overview Tab

Description of program for 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 MDes Industrial Design program is a professionally oriented graduate qualification which supports those intending to go into the professional practice of Industrial Design. The program takes a broad view of design practice in this area to embrace all aspects of human centered design including user interface and interaction design, but with a primary focus on industrial and product design. The program involves a high level approach to design thinking and design practice and so fits graduates for work in many sectors of activity. The program is highly project-based with an emphasis on hands on creativity in both the physical and digital realms.

As a graduate qualification it is applicable to students with an undergraduate degree in design, but also those with degrees in Engineering or Business who want to broaden their career options, as well as mid career designers with similar ambitions. It builds on the long standing MFA in Industrial design and involves study alongside students on that program in dedicated studio spaces. The location of the program in the School of Art and Design enables connections with students and faculty in other programs in the School as well as with colleagues and facilities across the University. These connections could include the Business, Medical and Engineering Colleges as well as the new Siebel Center for Design.

Graduates of the program will work in companies and consultancies, as well as in many roles now opening up for designers and design thinkers in business and social sector organizations. Design is now a global function in many organizations.

For additional details and requirements refer to the department's graduate studies requirements and the Graduate College Handbook.

Statement for Programs of Study Catalog

Course List

Code	Title	Hours
ARTD 501	Industrial Design I	6
ARTD 502	Industrial Design II	6
ARTD 503	Industrial Design III	6
ARTD 504	Industrial Design IV	6
ARTD 505	Industrial Design V	6
ARTD 506	Industrial Design VI	6
ARTD 599	Thesis (Document production)	4

Code	Title	Hours
	Design Studio Electives (from Art and Design, Architecture or Engineering, approved by Graduate Coordinator)	8
	Academic Elective (approved by Graduate Coordinator)	4
	Additional Electives, including Seminars (approved by Graduate Coordinator)	12
	Total Hours	64

Grad Other Degree Requirements

Requirement	Description
Other requirements may overlap	
Seminar, enrollment varies by program	8 min
Minimum 500-level Hours Required Overall	12
Minimum GPA	2.75

Corresponding Degree MDes Master of Design

Program Features

Academic Level Graduate

Does this major have transcripted concentrations? No

What is the typical time to completion of this program?
2 years

What are the minimum Total Credit Hours required for this program?
64

What is the required GPA? 2.75

CIP Code 110105 - Human-Centered Technology Design.

Is This a Teacher Certification Program? No

Will specialized accreditation be sought for this program?
Yes

Describe the plans for seeking specialized accreditation:

National Association of Schools of Art and Design (NASAD) accreditation will be reviewed in March 2023 and formally sought once institutional approval is granted with Fall 2023 approval expected. NASAD accreditation determines content, learning objectives and program compliance with NASAD standards.

Delivery Method

This program is available:

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

Admission Requirements

Desired Effective Fall 2023

Admissions Term

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.

This program will be administered by the existing admissions structure in the School of Art & Design. Admission requirements would be an undergraduate degree in Industrial design or a related subject. This could include Engineering, Business or Technology subjects as well as other design areas. A portfolio would be required but this could be in a different format from a conventional design portfolio. Other graduate requirements as designated by the Graduate College (proof of English proficiency, etc).

Enrollment

Number of Students in Program (estimate)

Year One Estimate	10-15	5th Year Estimate (or when fully implemented)	50
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Estimated Annual Number of Degrees Awarded

Year One Estimate	0	5th Year Estimate (or when fully implemented)	30
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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

Attach File(s)

Financial Resources

How does the unit intend to financially support this proposal?

The current institutional funding model encompasses the courses required for this concentration. Therefore, no additional funds are needed for this program.

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

No

Attach letters of support

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

FAA Graduate Differential

Is this program requesting self-supporting status?

No

IBHE

Degree Program Title and Overview

What is the specific title of the proposed degree program as it would be listed in the IBHE Program Inventory? The name should be what typically is used for similar programs nationally. Provide a short description of the program, including highlights of the program objectives, and the careers, occupations, or further educational opportunities for which the program will prepare graduates.

Master of Design (MDes) in Industrial Design (ID)

The MDes ID program is a professionally oriented graduate qualification which is intended to support those intending to go into the professional practice of Industrial design. The program takes a broad view of design practice in this area to embrace all aspects of human centered design including user interface and interaction design, but with a primary focus on industrial and product design. The program involves a high level approach to design thinking and design practice and so fits graduates for work in many sectors of activity. The program is highly project based with an emphasis on hands on creativity in both the physical and digital realms.

As a graduate qualification it is applicable to students with an undergraduate degree in design, those with degrees in Engineering or Business who want to broaden their career options, as well as mid-career designers with similar ambitions. It builds on the long standing Master of Fine Arts (MFA) in Industrial Design and involves study alongside students on that program in dedicated studio spaces. The location of the program in the School of Art and Design enables connections with students and faculty in other programs in the School as well as with colleagues and facilities across the University. These connections could include the Business, Medical and Engineering Colleges as well as the new Siebel Center for Design. The program will be STEM designated, of great benefit to international students.

Graduates of the program will work in companies and consultancies, as well as in many roles now opening up for designers and design thinkers in business and social sector organizations. Design is now a global function in many organizations.

Illinois Administrative Code: 1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university; B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

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 Industrial design program at UIUC is long established at undergraduate (BFA) and graduate (MFA) level. MFA programs nationally have either an academic or professional focus. The MFA is considered the terminal degree in design for people who plan to teach in US Higher education institutions. Currently the MFA is offered in two year and three versions, with the three year version including teaching practice, funding and tuition waivers and being considered as the academic variant. The curriculum for the two year version is identical and it is considered to be the professional route. In recent years funding availability and the dearth of linguistically qualified international applicants has reduced the intake to the three year route to 1-3 students in any year, whilst the intake to the two year route has increased. Most of the intake comprises international students and that intake is now affected by the number of competitive programs which have STEM designation. As STEM CIP-codes now include programs in human-centered technology design, that number will increase nationally.

The replacement of the two year MFA with the MDes ID program will clarify the situation by making that program more explicitly professional. As both programs are heavily project based, it will be possible to offer both programs with the same curriculum and course structure, enabling efficiencies of delivery with expanded numbers. The programs will also benefit from the availability of the new Graduate Certificate in Advanced design thinking which comprises the first two studio courses in the program and can act as a feeder route for MFA or MDes ID.

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.

The University has recognized in recent years the value of design thinking and human centered design outside the traditional Art and Design curriculum, with the Siebel Center for Design, Technology Entrepreneur Center, and Carle Illinois College of Medicine all evidencing this. This addition to the University's traditional academic and research focus has impacted many parts of the University mission. Specifically, it addresses Campus Strategic Plan Goal II (Provide transformative learning experiences), by providing hands-on, integrative learning experiences, as well as Goal III (Make a significant and visible societal impact), by preparing students for the societal challenges of meeting the demands for design practice.

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://lmi.ides.state.il.us/> and/or the U.S. Bureau for Labor Statistics at <http://www.bls.gov/>).

The application for the existing MFA 2 year route is high and five times more places are often offered than the number taken up. In recent years the lack of STEM designation is often cited by international students as a determining factor in not accepting the offer. The employment record of graduates from the existing program is good, even though the international students are at somewhat of a disadvantage in getting US job placements before their visa expires (hence the importance of STEM). Graduates from the existing ID MFA program already work in professional careers as well as in academia, both in the USA and internationally, often with more than 50% of the graduate cohort working professionally. The creation of the MDes ID program will increase this percentage as it will contribute to increased numbers overall. The shift in focus to the professional will increase local and international recruitment, particularly of non-traditional applicants and this will increase the impact of the program locally, nationally, and internationally. The value of design thinking and improved design strategies is now widely recognized in industry so the availability of more opportunities to study that at graduate level will be a good thing.

Common job titles for graduates include industrial designer, product designer, product developer, environmental designer, furniture designer, lighting designer, toy designer, multimedia designer, exhibit designer, and interface designer or developer. Experienced designers in large firms may advance to chief designer, design department head, or other supervisory positions. Some experienced designers open their own design consulting firms.

The US Department of Labor Occupational Outlook Handbook (<https://www.bls.gov/ooh/arts-and-design/industrial-designers.htm>) projects 2,700 job openings for industrial designers each year. In 2021, the median pay for Industrial Designers with at least a bachelor's degree was \$77,030 per year (<https://www.bls.gov/ooh/>), but for UIUC undergraduates graduating from the BFA in ID it was \$82,063 (<https://illinisuccess.illinois.edu/>). Students entering the professional workforce with a MDes in ID are further qualified and have the potential to earn beyond the bachelor's level graduates.

The Illinois Department of Employment Security (<https://illinoisjoblink.illinois.gov/>) job search for commercial and industrial designers' with an education level of master's degree as of 9/26/22 has thousands of open positions from companies such as McKinsey Design (UX & Industrial Designer), HDR Engineering (CAD Designer-Industrial), Morningstar (Senior Product Designer), Capital One (Commercial Experience Design), and many more.

Additionally, the Industrial Designers Society of America (<https://www.idsa.org/opportunities/job-board>) shows 195 creative job opportunities as of 9/26/22 and UIUC Handshake (<https://handshake.illinois.edu/>) reflects 1,600 opportunities with filters for ID major and keywords industrial design as of 9/26/22.

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

FAA Career Services provides industry specific support for graduate level Industrial Designers including individual career coaching and review of application materials, annual portfolio clinics and career fairs, and a weekly newsletter, in collaboration with Siebel Center for Design, which compiles events and opportunities of particular interest to designers.

If letters of support are available attach them here:

Comparable Programs in Illinois

Illinois Administrative Code: 1050.30(a)(6): B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service. For additional information about similar programs, check the Degree Program Inventory on the IBHE website (https://www.ibhe.org/ProgInv_Prog.aspx) and review the Notice of Intent website for programs being planned (<http://legacy.ibhe.org/ODA/tracking/NOI/NOISearch.asp>).

Identify similar programs and sponsoring institutions in the state, at both public and private colleges and universities. Compare the proposed program with these programs, and discuss its potential impact upon them. Provide complete responses, do not reference website links.

Chicago is a national center for design thinking and design programs with UIC, Columbia College, SAIC, Northwestern and the Institute of Design at IIT all offering graduate ID programs. Within commuting distance we can include Purdue and Notre Dame Universities. All these are good programs and well established. The unique character that this new program at UIUC can offer derives from its location in a Research 1 University in an affordable community, with access to unparalleled facilities and faculty. The MDes ID program will attract students who see the benefit of that character and wish to realize those benefits in a residential community. It also builds on existing programs with long and enviable histories. The BFA ID program here was one of the first in the country, as was the MFA, so there are some sound foundations to build on to create a program which will be complementary to those existing programs in urban institutions. This is of particular relevance to the UIC program as UIUC already attracts a different demographic for its respective BFA programs and the ID program is familiar with that. At the graduate level UIUC cannot easily offer part time study compatible with the existing programs but the attractions of residential study with economic living costs in a Research 1 University remain significant.

Comparable Programs in Illinois Attach Documents

A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth

IBHE is charged to develop a strategic plan to address the present and future aims and needs and requirements of higher education in Illinois (110 ILCS 205/6) (from Ch. 144, par. 186) Sec. 6). Illinois Administrative Code:

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically justified based on the educational priorities and needs of the citizens of Illinois Respond to the following questions about how the proposed program will support the three goals of A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth Strategic Plan.

Equity

Describe institutional-level plans to close equity gaps in access, progression, completion, and attainment and the implications for the proposed program. More specifically, provide institutional-level plans for attracting, recruiting, retaining, and completing a diverse group of students including working adults, students of color, transfer and low-income students and implications for the proposed program. Explain how progress will be monitored.

The ID program at Illinois is dedicated to closing equity gaps and attracting and retaining diverse groups of students in the new MDes ID program. ID faculty believe the distinction of a two-year, professional MDes ID program will appeal to people who do not wish to enter academia and are looking for a MDes qualification which is STEM-designated and prepares them for a professional career immediately after graduation.

The program will support and build on the University's existing work in diversity, equity, and inclusion and will also provide another opportunity for those students who have been attracted to UIUC undergraduate programs to continue their study at UIUC at Graduate level. One example of this is the Aspire Illinois program for UIUC undergraduates to receive financial support while exploring and considering graduate school at UIUC (<https://grad.illinois.edu/diversity/aspire>). Another recruitment tool to attract and enroll prospective graduate students from underrepresented populations is the Community of Scholars Campus visit which provides a tailored visit opportunity for talented students from underrepresented backgrounds (<https://grad.illinois.edu/diversity/cos>).

At the program level, the MDes ID program builds on the existing success of the MFA program to build synergy within and among annual cohorts of graduate students who participate together in the institutional programs and services described above. Since both the MFA and MDes degrees are structured around a cohort model, students admitted together will be able to provide encouragement and support for each other that extends into student membership in underrepresented groups. The diverse ID faculty and their research interests also provide opportunities for one-to-one support and mentoring for diverse students. Some examples of the breadth of projects that master's level ID students have completed with ID faculty support are:

Lijang Fu....Breast cancer self examination training device;
Hanyu Zhu....Modular Coach bus with variable seating configurations;
Yalin Li.....Cordless cleaner for hard floors;
Zhihao Tang.....Smell capture device;
Zhaofou Zhang.....Haptic controller;
Lingxi Zheng....modular travel trailer;
Hunter Zhang....Dress sneakers;
Shafagh Hadnezhad.....Design guide for designers worked with unsighted people;
Ehsan Noursalehi.....Low cost prosthetics;
Jimmy Chen....folding bicycle helmet;
Simon Dai.....variable office sit/sleep chair.

The current student body in the ID program is diverse in gender and ethnicity with a good representation of international students. At the Graduate level recent cohorts have been exclusively international students, primarily from China and India, as well as Iran and South Korea, with good gender diversity. Although this represents significant income generation for the University, a program goal is to restore the proportion of

domestic students to 2010 levels, partly to improve the experience for international students themselves. Changing to an MDes qualification is a move that will enhance the relevance of the program to domestic applicants who find a MDes as a professional degree appealing compared to the current MFA without a clear professional track. The program faculty also intend to recruit more diverse students by applying for Building Alliances to Diversify Graduate Education funds from the Graduate College, which would allow for travel recruitment of historically underrepresented students in higher education

(<https://grad.illinois.edu/diversity/badge-funding>). The ID faculty also currently recruit students at various events in Chicago and will prioritize inviting alumni who represent the diverse student body to share their experiences and personal program outcomes, such as current position and place of work.

Describe program and institution-based high-impact practices and wrap-around student support services ensuring equitable access and success for students enrolled in the proposed program.

In the College of Fine and Applied Arts (FAA), the Diversity, Equity, and Inclusion Committee works to engage with all units and areas of the college to create and promote a welcoming, safe, and accessible environment for all. The committee mandate is to advance diversity, inclusion, and equity, and oppose racism, sexism, homophobia, and prejudice in all its forms, in all aspects of the college mission. The chair (Dr. Rochelle Sennet, Music) also serves to connect college-level goals and work to campus-level initiatives and priorities.

The School of Art & Design's Committee to Promote Anti-Racism, Inclusion, and Equity is charged to give guidance to the school on how to address issues of implicit and unconscious bias, structural white supremacy, misogyny, LGBTQ intolerance, and where these systems of oppression and exclusion intersect; these, and other cultural and institutional barriers to genuine equity and inclusion in the School.

In the School of Art & Design, several initiatives have been undertaken to emphasize diversity, equity, and inclusion. One example is the "one school, one book" project that is being held this academic year (2021-22), where faculty and students have been encouraged to incorporate the same book into multiple classes and projects. This year's book is Ibram X. Kendi's (2019) *How to be an Anti-racist* which was provided to all faculty and discussed. Another example is the workshop called "Racism Untaught" workshop recently hosted that many ID faculty attended. These practices contribute to a culture of inclusion and awareness to provide support for students in the MDes ID.

With ID program faculty committed to a systematic focus looking at equitable student support and showcasing the full services Illinois has to offer, the annual review of the experiences of historically-underrepresented students including professional development, internship placement, involvement in portfolio reviews with alumni and program stakeholders, time to degree, and job placement will ensure that the success of historically-underrepresented students in the MDes ID program is never overlooked and that their achievements are esteemed.

Explain institutional strategies being implemented to increase and retain faculty, staff, and administrators of color and the implications for the proposed program. Explain how progress will be monitored.

The current student body in the ID program is diverse in its international composition and the faculty has extensive international experience. The ID Program chair has studied in both Italy and India, and also worked in Singapore, Holland and China for major Industrial companies. The Masters program coordinator has worked in India and the UK, both in education and as a consultant for Yamaha and British Rail, and has also travelled extensively in the Asia Pacific region. Prof Aguilar has studied in Brazil and the USA, with projects in many locations. Prof Simrun Sethi has studied in India and Italy with professional experience with a number of global brands. Prof Shin has studied in Korea and the USA with professional experience with LG, amongst other companies, and an active practice of international collaboration. This broad range of experience informs and enriches the program, and is particularly relevant to a program which will have a large complement of international students.

The ID faculty recognize that gender diversity and diversity of more faculty of color requires both commitment and action. The ID faculty acknowledge that there is an issue with gender diversity of faculty and are actively addressing this with adjunct and visiting positions. For example we have used remote learning to work with an a female adjunct faculty member in New York for the last two years. A proposal is on the December 2023 agenda to appoint two female colleagues in Engineering to 0% appointments, which would recognize their longstanding contributions to the program including service on MFA ID thesis committees and collaboration in graduate coursework. The Visiting External critic for the MFA program has been female for half of the appointments in recent years. There is also existing program funding which the ID program chair has committed to inviting and compensating guest lecturers who are female or persons of color to speak at the graduate seminars. Ultimately the key faculty representation will only be changed by increased faculty appointments which the income from additional self funded students should help to support. The School of Art & Design is committed to addressing that as quickly as practicable.

In addition to the visibility of the above, retaining faculty is of utmost importance and prioritized. All faculty are supported through bi-weekly meetings, each of which begins with celebrating accomplishments since the previous meeting. Twice a year, the faculty gather together for a day-long retreat where they focus on strategic planning. Topics at the most recent retreat included the goals of the program, admissions policies, curriculum changes, transfer students, MFA admissions for fall, and policies and procedures for the proposed MDes.

In the School of Art & Design, a recent topic related to retention is the disproportionate demand for service from faculty of color across all levels of the university and beyond, which needs to be acknowledged and accommodated as far as possible at the program level through service assignments that are among their first choices.

As mentioned above, students who join the MDes program will have access to the university's array of cultural "houses"—centers that focus on outreach, education and support for under-represented groups on campus. These houses include the Asian American Cultural Center, the Bruce D. Nesbitt African American Cultural Center, La Casa Cultural Latina and Native American House. Student-led groups, such as the Black Graduate Student Association, Mexican Student Association and Puerto Rico Student

Association, are also available.

The ID faculty are engaged in a variety of unique research and community engagement activities relevant to the MDes which may be of interest to recruit and retain faculty of color. Prof Weightman collaborated with colleagues in Architecture and Environmental engineering on the design of low cost solar powered manufactured housing for three of the US Dept of Energy Solar decathlons competitions as well as being associated with the Technology Entrepreneur Center on campus. Prof Sethi is involved with developing visualization strategies for designers and others. Prof. Aguiar examined how an interactive, cyber-physical artifact support marginal groups to co-generate media and make this media visible and "heard" in the larger community and how a suite of interactive furnishing help elders to age in place more independently. Prof. Shen has worked on projects such as a tongue cleaner for kids (Lollipop), head gear for law enforcement (Intelligente), and printable prosthetics (Illume) as well as gaining several international design awards.

One example of the college's active role in equity work was in fall 2022 when the college held a Transforming FAA Towards Justice and Racial Equity in the Arts symposium for all faculty, staff, and students to attend.

Each of these aspects comprise the institutional strategies to increase and retain a diverse group of faculty with a goal of bringing in additional faculty of color and female faculty members as new hires for the program may become available.

Sustainability

Describe strategies and initiatives the institution plans to implement that makes the proposed program and college more generally affordable for students and their families, including those who have been historically underserved.

This program is very competitively priced in comparison to the local and national competition, especially private Universities, and the University infra structure is very supportive for historically underserved students. As a professional degree, the MDes will not have assistantships offered as part of the program admissions although domestic applicants will find opportunities for scholarships and on-campus employment through the Graduate College funding options page at <https://grad.illinois.edu/prospective/funding>.

Provide tuition cost analysis for comparable programs and institutions in Illinois.

The three programs of closest comparison are the following:

1. University of Illinois Chicago - School of Design - Master of Design in Industrial Design. Tuition/semester = \$6,083 base rate plus \$2,519 differential = \$8,602 plus graduate fees. Two-year program with 64 credit hours required.
2. Illinois Institute of Technology- Master of Design. Tuition/semester = \$24,501 plus

fees. Two-year, 54 credit hours required.

3. Northwestern University - McCormick School of Engineering and Applied Science- Master of Science in Product Design and Development Management. Two-year program on a quarter system. Tuition/quarter = \$22,928 plus fees.

For comparison, the FAA Graduate Differential charged for the MDes ID is:

Tuition/semester = \$7,295 plus fees. Two-year program with 64 credit hours required.

The proposed program is the most affordable compared to the three programs above.

Growth

Provide a supply and demand analysis for the proposed program that, at minimum, does the following: a) Provides evidence of student interest in the proposed program including any strategies to incentivize students to stay in Illinois. b) Identifies and provides evidence of a high-quality credential with viability for future careers.

Due to the MFA already having a two-year professional track, there have already been student inquiries from potential MFA applicants who are interested in the two-year professional track rather than a three- year teaching track to academia.

a) Evidence of student interest exists from the MFA two-year program but with new advantages including STEM designation/24 month extended Optional Practical Training, the MDes degree desirability, and therefore interest will only be enhanced.

b) A MFA degree traditionally is an entry into teaching or step to PhD qualification and a MDes is becoming the title for a high-level post graduate qualification and as an entry into professional work is appealing for many students, domestic and international.

Explain how the program engaged with business and industry in its development and how it will spur the state's economy by leveraging partnerships with local, regional, and state industry, business leaders and employers.

Faculty on the development team for the MDes have consulted extensively with industry at every level, as well as business leaders and employers.

Experience with the current MFA students indicates that industry links for the MDes students would be many and diverse. MFA students are very successful in finding internships during their studies, both within the University and outside. Within the University students have collaborated on projects within the Siebel Center for Design, the Technology entrepreneur Center, the Beckman Institute as well as with colleagues in Mechanical Engineering, BioEngineering and various ventures in the Research Park. MFA ID graduate students are very much in demand for project teams and competition entries as they combine design and communication skills with technical expertise and resourcefulness. Some students have gone on to form companies housed in University Incubator units including Ehsan Noursalehie and his Low cost Prosthetic company with user distribution in Latin America. Students are also successful in doing internships with companies, with maybe the best example being Metaphase a human centered design consultancy in St Louis which has taken two of the MFA ID students as interns and employees over the years. Other students will establish links with companies in their own countries for internships and subsequent employment. A recent MFA graduate has just started work with a major Chinese producer of electric cars. The MDes degree will only increase these connections, and STEM accreditation will enable more graduates to find employment in the USA, whether temporary or permanent.

Every semester ID, faculty bring in an external critic and all the ID graduate students present to them about their semesters work. We would plan to extend this to cover MDes students as well. This is an essential part of ensuring that our courses are professionally relevant. In recent years these have included.....Doris Wells Papanek, Design Learning network; Steve Visser, ID Program chair, Purdue University; Mark Baskinger, ID Program chair, Carnegie Mellon University; Marianne Grisedale, TEAMS Design Chicago; Steven Melamed Tres Design group and UIC.

In addition, faculty in ID are in regular contact with potential employers through the annual portfolio review program and job fair, both organized at the College level by Julie Rundell, Assistant Director of Career Services.

Describe how the proposed program will expand access and opportunities for students through high-impact practices including research opportunities, internships, apprenticeships, career pathways, and other field experiences.

The program will increase the numbers of students graduating from the University with high level skills in Industrial design and a specific focus on human-centered design thinking. Some of those students will have an undergraduate degree in Industrial design and will be able to move into the industry at a higher level than with that degree, enhancing their career prospects. Others will come to the program with undergraduate degrees in related subjects and will be able to broaden as well as enhance their career prospects and opportunities. Opportunities for interdisciplinary work will expand within the program cohort but will also expand to include the wider University, as well as the research and entrepreneurial communities, both local and national. Students on the existing MFA already have internships at the University Research Park and in the Siebel Center for Design, as well as local and national companies, and ID faculty predict that the more professional focus of the MDes program and its students will only increase this.

The associated STEM accreditation with extended OPT will enable international students to gain employment in the US, addressing high level skill shortages and well as enabling companies and other institutions to gain benefit from their abilities.

The integrated nature of the educational offerings at graduate level in ID will enable people to come into the Graduate Certificate in Advanced Design Thinking with options to then convert to MDes or MFA as their intentions and career plans develop.

Explain how the proposed program will expand its models of teaching and learning, research, and/or public service and outreach that provide opportunity for students to succeed in the work of the future.

The wide adoption of design thinking and Human-centered design practices is changing how industry and institutions work and this process will only expand in the future. It will also become more demanding as it will no longer be enough to include design considerations but the quality of those elements will be a major differentiator for organizations seeking to improve their performance. This program emphasizes enquiry, insights and ideation, leading to more effective implementation of design solutions that genuinely benefit people. The processes used and skills developed in doing that inherently involve "learning to learn" and collaboration skills as essential. Both of those aspects are critically important to prepare people for a changing future where continuous career development will be the norm.

Beyond workforce need, describe how the program broadly addresses societal needs (e.g., cultural or liberal arts contribution, lifelong learning of Illinois residents, or civic participation).

Industrial design and human-centered design both involve “considering all aspects of the relationship between people and the products, services and experiences they encounter” to quote Tim Brown of IDEO, a major international Design consultancy. This means taking a holistic view of all those aspects to include those formerly considered to be in the realm of culture and the humanities, thus addressing societal needs in the broadest sense. This is particularly significant with a program that will have a large percentage of international students who value what they can gain from a higher education experience in the US. This is in addition to the effect of international students on domestic and local students in the program, the School of Art and Design and the University, contributing to their global awareness. This program will also contribute to developing the interface between a Research 1 University and the local and national communities. Designing better interfaces between people and technology is at the heart of ID practice and this program will help to achieve that.

A Thriving Illinois:
Higher Education
Paths to Equity,
Sustainability, and
Growth - Attach
Documents

Program Description and Requirements

Illinois Administrative Code:

1050.30(b)(1) A) The caliber and content to the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction.

1050.30(b)(3): Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

1050.50 (a)(2)(C) Requirement for Programs in which State Licensure is Required for Employment in the Field: In the case of a program in which State licensure is required for employment in the field, a program can be found to be in good standing if the institution is able to provide evidence that program graduates are eligible to take the appropriate licensure examination and pass rates are maintained as specified in the objectives of the unit of instruction. If there is no such evidence, the institution shall report the program as flagged for review.

Program Description

Provide a description of the proposed program and its curriculum, including a list of the required core courses and short (“catalog”) descriptions of each one. (This list should identify all courses newly developed for the program).

Provide Program Description here:

Industrial Design is the human centered design activity that determines the nature of products, services and experiences produced by industry. This approach to design reconciles the needs of the user and the producer, combining desirability, viability, feasibility and responsibility. Industrial designers also champion the use of design thinking, a user-centered approach which has broad application in many social and business contexts. The Industrial Design program at the University of Illinois Urbana-Champaign extends the definition of Industrial design to include the design of interfaces, interactions and user experiences.

The MDes (MDes) Industrial Design Program aims to educate you about the theoretical basis of Industrial Design as well as developing your abilities as a designer. The program combines a broad educational approach with in-depth professional studies, to expand your skills in research, creation, implementation and communication, enabling you to function in many diverse situations.

The degree of Master of Design in Industrial Design is an advanced professional qualification suited to developing your future design career in practice. The program of study is highly individualized in order to help you achieve professional excellence by matching your interests, skills, and career goals with the challenge of higher-level study in design, also acknowledging the range of opportunities for interdisciplinary study at the University. The program is international in scope and stresses the development of design solutions that are human-centered and culturally appropriate. The design process model used is based on a six step sequence....Inquiry, Insight, Ideation, Involvement, Implementation and Informing. The program requires full-time enrollment on campus for four regular semesters and provides advanced professional study. The curriculum aligns with NASAD (the National Association of Schools of Art and Design) for a master's degree in design.

For additional details and requirements refer to the MDes Program Handbook and the Graduate College Handbook.

Attach Program Description Files if needed [MDes ID Course Descriptions 9_27_22.docx](#)
[MDes ID Explanation of Electives.docx](#)

Graduation Requirements

Provide a brief narrative description of all graduation requirements, including, but not limited to, credit hour requirements, and, where relevant, requirements for internship, practicum, or clinical. For a graduate program, summarize information about the requirements for completion of the thesis or dissertation, including the thesis committees, and the final defense of the thesis or dissertation. If a thesis or dissertation is not required in a graduate program, explain how the functional equivalent is achieved.

The MDes ID requires 64 credit hours, completed across four semesters in two years with 16 credit hours each semester. The 64 hours are comprised of: 36 hours ID core courses, 4 hours thesis preparation, 24 elective hours of which 8 must be design studio courses and of which 4 must be in an academic area. At least 12 hours must be completed at the 500-level and the program minimum GPA is 2.75. Students will complete 16 hours/semester for 4 semesters to complete the 64 hours.

Every student does a Thesis project in the sequence of three Studio courses ARTD 504, 505 and 506, with documentation produced in ARTD 599. The thesis project is intended to be a piece of original work, comprising primary and secondary research, design investigations and prototyping, with detailed implementation of a final design proposal. This work will be communicated in critiques at various stages, along with exhibition in the MFA final show in May in the Krannert Art Museum or equivalent. A report would be filed with the Graduate College, as is practice with the MFA ID program. Each student works out the thesis topic in detail with their committee chair who will be an ID Graduate faculty member. They will also negotiate the choice of two committee members. These would normally be one person from the ID Graduate faculty and one faculty member from elsewhere in the University. Exceptionally the committee can include members from other Universities or the wider community. The student can expect regular contact with their faculty chair during the semester and periodic meetings with the full committee. At the end of each semester each graduate student will present their semesters work in an event to which all interested faculty and peers are invited, as well as an External critic from Industry or Higher Education. Their feedback is taken into account in grading and determining progression of the graduate students. The final presentation of ARTD 506 constitutes the final defense of the thesis project. The Thesis committee will also sign off on the Thesis report for completion of the degree.

These requirements and thesis approval process are detailed in the Graduate College Handbook (<https://grad.illinois.edu/sites/grad.illinois.edu/files/pdfs/handbook.pdf>).

Specialized Program Accreditation

Describe the institution's plan for seeking specialized accreditation for this program. Indicate if there is no specialized accreditation for this program or if it is not applicable.

The program will need to be ratified by NASAD (the National Association of Schools of Art and Design) which is the national accreditation body for all Art and design programs. NASAD were informed of the intentions to submit the MDes ID at their recent Accreditation visit and are supportive, particularly as this resolves an issue with us offering two and three years versions of the MFA, without teaching practice in the case of the two year version. NASAD has validated a number of MDes programs around the country in recent years. The document for NASAD consists of the following sections:

1. Degree Title and Statement of Purpose
2. Curricular table in the NASAD format
3. Compliance with NASAD Standards for the new graduate degree
 - a. Competencies required by applicable Standards
 - b. Required levels of achievement
 - c. Common standards and goals for all graduate degrees
 - d. Distance learning
 - e. Multi- or interdisciplinary combination
 - f. Focus on electronic media
 - g. A discussion of the following must be included:
 - (1) Proficiencies required for entrance to the program
 - (2) Research and professional tools required in the program
 - (a) Required undergraduate grade point average in the new graduate curriculum if the applicant has had no previous graduate study (A = 4.0)
 - (b) Required grade point average in previous graduate work for the new graduate curriculum (A = 4.0)
 - (c) Describe the residence requirements for the new graduate curriculum
 - (d) Is credit from other institutions transferable to the new graduate curriculum?
 - (e) Minimum number of credit hours (specify quarter or semester) required beyond the baccalaureate for the new graduate curriculum
 - (3) Comprehensive review at or near the conclusion of degree study
 - (4) Candidacy and final project requirements for the program
 - (5) Preparation for the Professions
 - (6) Breadth of Competence
4. Faculty teaching responsibilities Recent Books by Faculty
Current Project Highlights Recent Visiting Design Critics Faculty Research Interests
Biography of the director and/or major professors Graduate Faculty
 - (a) How are graduate faculty members selected and designated?
 - (b) Teaching load credit for the direction of graduate dissertations, projects, etc.
 - (c) Qualified faculty
5. Present and projected fiscal resources relevant to the new curriculum.
6. Description of available and/or projected facilities relevant to the new curriculum
7. Physical plant and equipment planning
8. Current and/or projected library holdings and learning resources Key Textbooks
Key Journals
Expenditures for art/design library acquisitions
9. A rationale for the new curriculum
 - (a) Reasons for adding this degree program

- (b) Unique aspects of this degree
- (c) Number of students expected to be served
- (d) Expectations for placement of graduates
- 10. Relationship between the new program and ongoing programs
- 11. Responsibilities for the new graduate degree
- 12. Context within existing graduate degrees in art/design
 - (a) Community of students and faculty
 - (b) Numbers of graduates and undergraduates
 - (c) Graduate degrees granted in art/design in the 12 months preceding last June 30
 - (1) initial graduate degrees
 - (2) terminal graduate degrees

Licensure or Certification for Graduates of the Program

If this program prepares graduates for entry into a career or profession that is regulated by the State of Illinois, describe how it is aligned with or meets licensure, certification, and/or entitlement requirements.

There are no licensure, certification, or entitlement requirements for this degree program.

Plan to Evaluate and Improve the Program

Describe the program's evaluation plan.

Every ten years, the School of Art and Design undergoes a full curriculum review for re-accreditation by the National Association of Schools of Art and Design (NASAD). The NASAD visitor's report is a useful tool for assessing the strengths of the school's programs, determining areas that need improvement, and strategies for growth and improvement. The last NASAD site visit and review was in April 2022.

In addition, as a NASAD member, the School of Art and Design is asked annually to respond to an accreditation audit, and to submit an affirmation statement. NASAD compliance states that:

"Plan Approval is required after institutional approval and before students are admitted into a new degree program. The application for Plan Approval includes information concerning the structure of the new curriculum as well as data concerning the faculty, library, equipment, and/or resources necessary for its support."

The School of Art and Design uses peer-reviewed book chapters, journal article publication, and peer-reviewed conference presentations as means to assess student performance, communicate the impact of programs, and provide students an emerging dissemination record that will prepare them for their future careers.

Other assessment data used to aid the evaluation of the program:

- Admission numbers disaggregated by race, gender, geography, concentration, and academic year
- Student performance data
- Student participation in study abroad programs
- Graduate research opportunities
- Retention rates and average time to complete the degree
- Student and alumni feedback
- Graduate program exit survey
- Student awards and recognition outside the School of Art and Design
- Job placements
- Alumni Surveys

In addition, the design faculty will regularly discuss the progress of the students at bi-weekly program meetings. The School of Art and Design Program Chairs Committee will review program outcomes beginning three years after the degree admits majors, and every three years thereafter. As part of that process the program has a practice of continuous review and improvement based on student feedback, with professional and industrial feedback from public exhibitions and portfolio review events. In the case of this program the biannual involvement of the External critic is an essential element of this evaluation. The university's annual learning outcomes assessment plan will serve as an additional point to review both the program's learning outcomes and assessment plan, as well as receive feedback from the Office of the Provost.

Plan to Evaluate
and Improve the
Program
Attachments

Budget Narrative

Fiscal and Personnel Resources

Illinois Administrative Code: 1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained; B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

Budget Rationale

Provide financial data that document the university's capacity to implement and sustain the proposed program and describe the program's sources of funding.

Is the unit's (Department, College, School) current budget adequate to support the program when fully implemented? If new resources are to be provided to the unit to support the program, what will be the source(s) of these funds? Is the program requesting new state funds? (During recent years, no new funds have been available from the state (IBHE) to support new degree programs).

Yes, the current department/school/college budget is adequate to support the program.

This is due to no new resources required as the program currently exists under the MFA 2-year program. The program is requesting no state funds.

Faculty Resources

Will current faculty be adequate to provide instruction for the new program or will additional faculty need to be hired? If additional hires will be made, please elaborate.

The current MFA program in Industrial Design has the capacity to include the anticipated growth of MDes students in its current classes.

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc.

The proposal will increase the size of existing classes to more economic levels (greater than 10 students per class). The current advising and recruitment structure for the MFA is capable of handling the increased workload associated with MDes students. The program will be promoted alongside the existing MFA. Some of the MDes students would have been MFA students in the existing structure so it already deals with part of that load.

Describe how the unit will support student advising, including job placement and/or admission to advanced studies. Will current staff be adequate to implement and maintain the new program or will additional staff be hired? Will current advising staff be adequate to provide student support and advisement, including job placement and or admission to advanced studies? If additional hires will be made, please elaborate.

The Coordinator of Graduate Affairs, the MFA and MDes program coordinator, and ID program chair all provide advising and support to students. FAA Career Services provides industry specific support for graduate level Industrial Designers including individual career coaching and review of application materials, annual portfolio clinics and career fairs, and a weekly newsletter, in collaboration with Siebel Center for Design, which compiles events and opportunities of particular interest to designers. Current staff are sufficient to implement and maintain the new program as it currently exists in the MFA two-year format until enrollment levels increase.

Are the unit's current facilities adequate to support the program when fully implemented? Will there need to be facility renovation or new construction to house the program?

Current facilities are adequate to support the program. The MDes will be located in the Art and Design building (408 E Peabody Dr, Champaign) and housed in the School of Art and Design. Graduate students are provided with desk space in a shared studio on the top floor of Flagg Hall. There are also three classrooms available for graduate seminars on the same floor classrooms available for graduate seminars on the same floor.

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.

Library collections, resources and services are sufficient to support the development of a MDes ID program.

Summarize information about library resources for the program, including a list of key textbooks, a list of key text and electronic journals that will support this program, and a short summary of general library resources of the University that will be used by the program's faculty, students, and staff.

Ricker Library of Architecture and Art is well equipped to support the needs of a MDEs ID program at the UIUC. It holds roughly 200,000 titles of books, journals, and databases related to architecture, art, and design practices with a roughly \$300K yearly allocated budget for materials and subscriptions [see annual budget allocations below]. The library's circulating and non-circulating library collection hold materials necessary for the success of the MDEs ID program, including key texts [see list below], special collections, and new materials research collection opening in spring 2023. There are two librarians (one focusing on Art and Architecture, and one focusing on Design and Materials), three staff personnel, and two graduate students who work with students and faculty to provide reference, hold instructional sessions, and create exhibits and library guides that empower patrons to finding information relevant to their research needs and interests.

Please review the attached document for key texts that support the program and annual budget allocations, provided by Siobhan McKissic, Visiting Design & Materials Research Librarian, Ricker Library of Architecture & Art.

Are any sources of funding temporary (e.g., grant funding)? If so, how will the program be sustained once these funds are exhausted?

There are no temporary or grant funded resources this proposal is reliant on.

If this is a graduate program, please discuss the intended use of graduate tuition waivers. If the program is dependent on the availability of waivers, how will the unit compensate for lost tuition revenue?

This program does not intend to offer or accept graduate tuition waivers.

Budget Narrative
Fiscal and

Personnel
Resources
Attachments

[MDes ID Texts Library Resources.docx](#)

Personnel Budget

Please complete all lines below; all fields are required. For fields where there is no anticipated cost or need, enter 0 or NA.

Category Year One Year Five Notes

Faculty (FTE)

Faculty FTE Year1	Faculty FTE Year 5	Faculty FTE Notes
0	0	No additional FTE faculty required for development of MDes, due to existing MFA ID two-year track.

Faculty (\$)

Faculty Year 1	Faculty Year 5	Faculty Notes
0	0	No additional faculty/instructors/adjunct required for development of MDes, due to existing MFA ID two-year track.

Advising Staff (\$)

Advising Staff Year 1	Advising Staff Year 5	Advising Staff Notes
0	0	No additional advising staff required for development of MDes, due to existing MFA ID two-year track.

Graduate

Students (\$)

Graduate Students Year 1	Graduate Students Year 5	Graduate Students Notes
0	0	No assistantships or funding provided for MDes graduate students.

Other Personnel

Costs

Other Personnel Costs Year 1	Other Personnel Costs Year 5	Other Personnel Costs Notes
0	0	No new personnel costs required for development of MDes, due to existing MFA ID two-year track.

Budget Narrative

Attachments

Facilities and Equipment

Illinois Administrative Code: 1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support high quality academic work in the unit of instruction, research or

public service are available and maintained;

B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service;

C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

Describe the facilities and equipment that are available, or that will be available, to develop and maintain high quality in this program. Summarize information about buildings, classrooms, office space, laboratories and equipment, and other instructional technologies for the program.

The School has extensive facilities available to students, including the following Digital Labs:

- Digital Commons, 235 Art & Design Building (ADB);
- Computer Classrooms, 224, 228, & 229 ADB;
- Digital Output Lab and Service Desk, 235A ADB

The Digital Commons (235 ADB) is open 24/7 during the semester. The Computer Classrooms (224, 228, 229) are also available 24/7 outside of scheduled class time. There are also four 3D fabrication labs, equipped with Zortrax and Form 2 printers:

- 12, 20, & 32 ADB and
- 38 Flagg Hall

The Zortrax printers use a process called Fused Filament Fabrication (FFF). With FFF printing, plastic filament is melted and squeezed through a nozzle, laying down one layer of extruded plastic at a time. The model is built by printing many thin layers of plastic. The level of detail or smoothness of the print is determined by the height of each layer of plastic.

The Form 2 printer uses a process called Stereolithography (SLA). With SLA printing, a printing plate is submerged in a vat of resin that can be cured, or made solid, by being exposed to ultraviolet light. A laser traces the path to be cured, and successive layers are built by raising the printing plate slightly and curing another layer of resin to the previous layer.

Additional equipment available to students in the 3D Fabrication Labs includes:

- Hand tools
- Power sanders (belt/disc, spindle, drum)
- Saws (table, compound miter, scroll, panel, band)
- Drill presses
- Hot wire tools
- Flexshaft/dremel tools
- Nailers/staplers
- Lathes
- Routers
- Planer
- Jointer
- Vacuum former
- Plasma cutting
- MIG and TIG welding
- Shopbot CNC routers

NOBLE HALL

The 3,345 square foot ink lab in Noble Hall houses a selection of traditional ink printing and binding equipment. Equipment available in the Noble Ink Lab includes:

- Charles Brand lithography press with aluminum plate backer, 29 x 48"
- Griffin lithography press with aluminum plate backer, 25 x 40"
- Over 30 litho stones, up to 20 x 25"
- Large stone graining sink and levigators
- Amergraph plate exposure unit, 31 x 41"
- Charles Brand etching press, 36 x 60"

- Takach etching press, 24 x 48"
- Antique etching press, 16 x 30"
- Aquatint box
- Vertical acid bath for copper plates
- Metal plate shear
- Takach hot plate, 24 x 36"
- Ventilated fume hood
- Poly-lite screen exposure unit, 26 x 42"
- Screen sprayout booth and power washer
- Challenge electric paper guillotine, 18" wide
- 3 Vandercook letterpresses
- An extensive collection of image cuts, and wood and metal type
- Washington press
- Nolan sign press

Ceramics facilities include 5,389 square feet of classrooms, studios and labs, including:

- Computer controlled electric kilns
- Large gas fired kilns
- Salt kiln
- Clay mixing facilities/pug mill
- Pneumatic and hand extruders
- Potter's wheels
- Glaze mixing and spray booth
- Slip casting molds and mixer
- Slab roller

Of special note is the lab's checkout window, which provides Art + Design students the opportunity to take advantage of the wide selection of equipment. Items available to students at the window include: professional digital SLR cameras; digital video cameras; audio recording equipment; film and print processing tools; digital projection and presentation equipment; computers and peripherals; medium and large format film cameras; continuous and strobe lighting equipment.

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

No

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

No

Are there other costs associated with implementing the program?

No

Facilities and
Equipment
Attachments

Faculty and Staff

Illinois Administrative Code: 1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met; B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities; C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

Describe the personnel resources available to develop and maintain a high quality program, including faculty (full- and part-time, current and new), staff (full- and part-time, current and new), and the administrative structure that will be in place to oversee the program. Also include a description of faculty qualifications, the faculty evaluation and reward structure, and student support services that will be provided by faculty and staff.

FACULTY

1. Suresh Sethi - Professor & Chair - Ph.D.
2. David Weightman - Professor & ID Coordinator - MDes
3. Cliff Shin - Associate Professor - MA
4. Carlos Aguiar - Assistant Professor - Ph.D.
5. James Kendall - Teaching Assistant Professor - MFA
6. Salman Raheel - Teaching Assistant Professor - MFA
7. Simrun Sethi - Teaching Assistant Professor - Master's

0% FACULTY APPOINTMENTS [PENDING DECEMBER 2022 APPROVAL]

1. Jennifer Amos, PhD. Teaching Asst Professor in Bioengineering
2. Molly Goldstein, PhD. Teaching Asst Professor in Industrial & Enterprise Systems Engineering

FACULTY EVALUATION AND REWARD STRUCTURE

Tenure-track faculty at the University of Illinois are evaluated annually based on activity reports created in accordance with the Office of the Provost Communication 9: Promotion and Tenure. The reports include comprehensive sections on research, teaching, and service, as well as an optional report on activities related to diversity, equity, and inclusion. The same report is the basis for tenure and promotion; at that stage, it is accompanied by letters from external reviewers and an assessment for each section, as well as an overall assessment from the unit executive officer.

<https://provost.illinois.edu/policies/provosts-communications/communication-9-promotion-and -tenure/>

FACULTY ADMINISTRATORS INCLUDE:

Alan Mette, Director
Melissa Pokorny, Associate Director
Lauretta Hogin, Associate Director
Lynne Dearborn, Associate Director

SUPPORT STAFF INCLUDE:

- David Akins, Director of Art & Design Facilities
- T. William Arnold, Technology Integration Specialist
- Chris Bonner, Facilities Manager
- Michael Collins, Fabrication Lab Coordinator
- Charmaine Edwards, Office Support Specialist
- Jenell Hardy, Assistant Director, Business Services
- Krys Harper, Educational Technology Specialist
- Nick Mullins, Fabrication Technology Specialist
- Kiley Reed Black, Technology Integration Specialist
- Ellen de Waard, Coordinator of Graduate Academic Affairs
- Shanitera Walker, Human Resources Coordinator

- Audra Weinstein, Administrative Aide
- Yunling Man, Accountant I

STUDENT SUPPORT SERVICES

The Coordinator of Graduate Affairs, the MFA and MDes program coordinator, and ID program chair all provide advising and support to students.

Summarize the major accomplishments of each key faculty member, including research/scholarship, publications, grant awards, honors and awards, etc. Include an abbreviated curriculum vitae or a short description.

Dr. Carlos Aguiar

Carlos Aguiar is an Assistant Professor in Industrial Design at the School of Art + Design, an Affiliate Faculty of Informatics at the School of Information Science. As a founder and director of the Design, Technology, and Society Lab (<https://designtechnologyandsocietylab.com>), Carlos lead the collaborative effort to investigate the interaction between humans and artifacts. The loci of Carlos' research lies at the intersection of Design, Science and Technology Studies, and Human Behavior– a prominent area characterized as increasingly digital, while persistently physical, cultural, and social. His research draws on the STS, Philosophy, and Theory of Design perspectives to inform the development of technological artifacts for social and cultural change, while also promoting a critical engagement with material culture to understand their implications within society. Carlos has a Ph.D. in Design and Human Behavior from Cornell University, an MSc in Design Computing from the University of Washington, and a Bachelor of Architecture and Urbanism from Estácio de Sá University (Brazil). Amongst other successes, he mentored two groups of students for the White Space Challenge, a national design competition for students: one group won the First place (judges decision), and the second group ranked in the top six.

James Kendall

James Kendall is a teaching Assistant Professor of Industrial Design with over three decades of professional experience designing and working with the consumer and healthcare industries. He is an accomplished designer creating global product platforms in consumer and medical markets through visual design/experience languages for high-volume manufacturing needs while balancing functional constraints and cost. Background includes close collaboration with teams of cross-functional disciplines to develop intellectual property, ergonomically sensitive user controls and displays, and precise, complex assemblies – all in aesthetically pleasing solutions. Other techniques uncovered unmet user needs through various design thinking tools, scenario planning, prototyping, and user ethnographic and consumer research. James holds a Master of Fine Arts (MFA) in Industrial Design from the University of Illinois at Urbana Champaign.

Salman Raheel

Salman Raheel is a designer whose creative path led him through industrial design and global manufacturing before dedicating himself to making objects by hand. The heart of his interests has to do with the principle of Beauty and creativity in the way we live in this world. Having earned his MFA in Industrial Design (1996) under his Graduate Advisor David Coleridge Ryan at the University of Illinois at Urbana-Champaign, he relocated to Italy in 1997. Settling in Tuscany, he met Ing. Carlo Doveri, a colleague of

Corradino D'Ascanio – inventor of the Vespa scooter. He joined Carlo Doveri's engineering team at EDI Progetti, developing scooter and motorcycle prototypes for clients worldwide, including Piaggio, Aprilia, Greaves Vehicles Ltd. (now PGVL), BMW, Peugeot, and Kymco.

In 2004, he joined Plastwood Srl, Sardinia, where he restructured and headed creative direction as Head of Design and Development, remaining with the toy company for three years developing new product lines and helping bridge the company's move to global manufacturing for international markets. Since 2011, he has worked across multiple disciplines on Haiku Sarti, an artistic-sartorial collaborative centered around clothing, music, and the visual arts. In 2018 he joined the Faculty of the Industrial Design program at the University of Illinois at Urbana-Champaign. Salman has an MFA in Industrial Design, and an MSc in Food Science/Biotechnology, from the University of Illinois at Urbana-Champaign.

Dr. Suresh Sethi

Suresh Sethi has been Chair of Industrial Design, School of Art & Design, since 2020. A Professor and James Avery Endowed Chair in Industrial Design, Sethi holds a Ph.D. in Industrial Design from IITB, a Master of Lighting Design from Domus Academy, Milan, Italy, and an Integrated Master's in Industrial Design from the National Institute of Design, Ahmedabad, India. Sethi joined the Illinois faculty in 2017. Sethi is a powerhouse of global experience – he has worked in America, China, Holland, Italy, India, and Singapore. Sethi was in a leadership role in a corporate environment – as Vice President, Design, Whirlpool Corporation Asia. He has been a founding Professor of the School of Art, Design, and Media, Nanyang Technological University, in Singapore. Sethi's designs emerge from the user's identity and lifestyle. For him, design is about building relationships between – product and user, product and profits, and product and production. He expands beyond the physical limits of materiality to an emotional level. His research on life under artificial light as multisensory interaction includes culture, emotion, and sensation is published in the book "Light Shines, Light Reflects." His current research focuses on the role of narratives in product form visualization.

Cliff Shin

Cliff Shin is an award-winning designer in design education and professional practice. He is a recipient of the IDSA Young Educator award, and his works have been recognized in Italy, Japan, Singapore, Hong Kong, Korea, and the USA. He is an Associate Professor of Industrial Design in the School of Art and Design at the University of Illinois at Urbana-Champaign. He received a BS in manufacturing engineering technology from Arizona State University and MA in industrial design from Purdue University. He worked for LG Headquarters Design Center as a senior industrial designer with expertise in consumer electronics, leveraging his undergraduate degree in Manufacturing Engineering and his master's degree in Industrial Design. He actively engages in multi-disciplinary projects across campus involving collaborators in Mechanical Science and Engineering, Neuroscience, Electrical, and Computer Engineering, Kinesiology, Consumer Science, Agriculture, and Advertising. He has served as a judge for the 2010 and 2012 International Housewares Student design competitions and the 23rd Appliance Design Annual Excellence in Design. He actively engages in consulting for designing in consumer electronics resulting in a Red Dot award and a European Product design award in 2021, amongst other accolades.

Simrun Sethi

Simrun Sethi is a Teaching Assistant Professor in Industrial Design at the School of Art & Design and GIES College of Business. She has a cross-industry experience in electronics, luxury, consumer goods, and higher education. Combined with a Master's Degree in Business Design from Domus Academy and over 30 years in the industry, She is a creative Strategic Designer experienced in leading design, innovation, new product development, and design strategy, with a successful track record in innovative projects for global brands. Professor Sethi works closely with RSOs to help design curriculum, lead lectures, and serve as a mentor to product teams. Professor Sethi has served as the faculty advisor to PMI since Fall 2021.

David Weightman

David Weightman is a Professor of Industrial Design in the School of Art and Design at the University of Illinois at Urbana Champaign. With a Master's degree in Industrial design (Engineering) from the Royal College of Art in London, he worked at the Indian Institute of Technology in Delhi and taught on the Industrial Design Transport program at Coventry University, He was Dean of the School of Art and Design at Staffordshire University and a consultant to Yamaha, Massey Ferguson, British Rail, BBC television and the Tate Gallery London. His teaching and research explores the changing relationship between product users and the design/ manufacturing process resulting from digital technology. Recent projects have also involved acoustic design and hearing conservation. A member of the National Association of Schools of Art and Design working group on the future of design education, he also served recently as Midwest District Vice President of the Industrial Design Society of America. For his sabbatical in Spring 2014, he was appointed an IDEA Studio scholar at Autodesk LLC in San Francisco, helping with the development of their Fusion 360 CAD modeling software. Most recently he was invited to be a member of the Core working group for the new Illinois Siebel Center for Design. He is also an active evaluator for the National Association of Schools of Art and Design with recent accreditation visits to Virginia

Faculty and Staff
Attachments

[MDes ID Faculty CVs.pdf](#)

HLC Section

Credit Hours

Existing or repackaged curricula (Courses from existing inventory of courses):	Number of Credit Hours: 100	64 Percent of Total:
Revised or redesigned curricula (Courses for which content has been revised for the new program):	Number of Credit Hours: 0	0 Percent of Total:
New curricula (Courses developed for the new program that have never been offered):	Number of Credit Hours: 0	0 Percent of Total:
Total Credit Hours of the Program:	Number of Credit Hours:	64 Percent of Total:

100

New Faculty Required

Will new faculty expertise or new faculty members be needed to launch this program?

No

Please explain existing coverage:

Existing faculty will teach the same courses and no new expertise is required to launch the program.

Additional Funds

Will the proposed program require a large outlay of additional funds by the institution?

No

Institutional Funding

Please explain institutional funding for proposed program:

The current institutional funding model encompasses the courses required for this concentration. Therefore, no additional funds are needed for this program.

EP Documentation

EP Control Number EP.23.030

Attach Rollback/Approval Notices

This proposal requires HLC inquiry No

DMI Documentation

Attach Final Approval Notices

Banner/Codebook Name

Program Code:

Minor Code	Conc Code	Degree Code	Major Code
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Senate Approval Date

Senate Conference

Approval Date

BOT Approval
Date

IBHE Approval
Date

HLC Approval
Date

DOE Approval
Date

Effective Date:

Attached
Document
Justification for
this request

Program Reviewer **Nicole Turner (nicturn) (11/04/22 12:03 pm):** Rollback: workflow update
Comments **Deb Forgacs (dforgacs) (11/04/22 12:22 pm):** Rollback: workflow
Mary Lowry (lowry) (11/09/22 3:56 pm): Rollback: rollback requested

Industrial Design, Master of Design Key Texts and General Library Resources

Ricker Library of Architecture and Art is well equipped to support the needs of a MDEs ID program at the UIUC. It holds roughly 200,000 titles of books, journals, and databases related to architecture, art, and design practices with a roughly \$300K yearly allocated budget for materials and subscriptions [see annual budget allocations below]. The library's circulating and non-circulating library collection hold materials necessary for the success of the MDEs ID program, including key texts [see list below], special collections, and new materials research collection opening in spring 2023. There are two librarians (one focusing on Art and Architecture, and one focusing on Design and Materials), three staff personnel, and two graduate students who work with students and faculty to provide reference, hold instructional sessions, and create exhibits and library guides that empower patrons to finding information relevant to their research needs and interests.

Key Texts that Support the Program

The Design of Everyday Things, Don Norman

Basic Books, 2013

Design by use , the everyday metamorphosis of things Uta Brandes, Sonja Stich and Miriam Wender

The Laws of Simplicity John Maeda

The MIT Press, 2006

The Universal Principles of Design William Lidwell et al.

Rockport Publishers, 2010

How Buildings Learn Stewart Brand

Penguin, 1995

Understanding Comics

Scott McCloud

William Morrow, 1994

The Year of the Looking Glass Julie Zhuo

Medium

Product Design for the Web

Randy J. Hunt

New Riders, 2014

Should Tech Designers Go with Their Guts — or the Data?, Braden Kowitz

Wired, November 11, 2013

Design for continuous experimentation, Dan McKinley

Warm Gun Design Conference, November 30, 2012

Building Websites with Science, Peter Seibel

Code as Craft, June 21, 2012

Change Aversion: Why Users Hate What You Launched (and What to Do about It)

Aaron Sedley

Google Ventures, April 24, 2012

Here Comes Everybody Clay Shirky

Penguin, 2009

Hidden in Plain Sight Jan Chipchase with Simon Steinhardt

HarperCollins, 2013

Innovating for people , a handbook of Human-centered design methods Luma Institute

A sound and eminently practical guide to methods of eliciting and evaluating user needs and desires with lots of very useful approaches. Highly recommended. Out of print often but available electronically on Amazon

PresentationZen Design...Garr Reynolds **

Creative confidence , unleashing the creative potential within us all Tom Kelley and David Kelley A great summary guide to design thinking by the originators of the term

Making it Chris Lefteri

Change by design Tim Brown

The Field guide to human centered design IDEO

Drunk tank pink Adam Alter

Design like Apple John Edson

Creativity Inc , overcoming the unseen forces that stand in the way of true inspiration Ed Catmull.

Becoming Steve Jobs , the evolution of a reckless upstart into a visionary leader Brent Schlender and Rick Tetzeli

After Steve, How Apple became a trillion dollar company and lost its soul Tripp Mickle.

Against the odds...James Dyson *

To sell is human, the surprising truth about moving others Daniel Pink

Hidden in Plain Sight Jan Chipchase with Simon Steinhardt

Made to stick Chip and Dan Heath *

Design of Business Roger Martin

Azure magazine

Wired magazine

Fast Company magazine

Harvard Business Review magazine

Inc. magazine

BusinessWeek magazine

MIT Technology Review magazine

Make magazine

Design Issues Journal

The Design journal

Innovation magazine

Metropolis magazine

Annual Budget Allocations

FY18 (2017-18)

Architecture (books, videos, etc.) 49,399.06

Art (books, videos, etc.) 88,546.47

Architecture serials (journals, electronic access, etc.) 38,927.42

Art serials (journals, electronic access, etc.) 77,766.15

Total: \$254,639.10

FY19 (2018-2019)

Architecture (books, videos, etc.) 50,256.97

Art (books, videos, etc.) 88,359.03

Architecture serials (journals, electronic access, etc.) 39,386.72

Art serials (journals, electronic access, etc.) 100,353.34

Total: \$278,356.06

FY20 (2019-2020)

Architecture (books, videos, etc) 50,000.06

Art (books, videos, etc) 87,727.14

Architecture serials (journals, electronic access, etc.) 39,480.95

Art serials (journals, electronic access, etc.) 104,285.85

Total: \$281,494.00

FY21 (2020-2021)

Architecture (books, videos, etc) 40,308.45

Art (books, videos, etc) 86,735.14

Architecture serials (journals, electronic access, etc.) 45,253.48

Art serials (journals, electronic access, etc.) 108,794.13

Total: \$281,361.20

FY22 (2021-2022)

Architecture (books, videos, etc) 43,271.36

Art (books, videos, etc) 91,462.25

Architecture serials (journals, electronic access, etc.) 50,875.30

Art serials (journals, electronic access, etc.) 107,529.67

Total: \$293,138.58

FY23 (2022-2023)

Architecture (books, videos, etc) 43,615.91

Art (books, videos, etc) 95,605.54

Architecture serials (journals, electronic access, etc.) 53,262.89

Art serials (journals, electronic access, etc.) 109,637.89

Total: \$302,122.23

Industrial Design, MDes (key 1163)

Electives in Program of Study

The National Association of Schools of Art and Design requirement is that 8 hours must be of academic focus. In this program, it is defined as ARTD 599 Thesis (4 hours) and at least one other academic course, such as seminars or electives. NASAD does not monitor this at an individual course level, therefore any course that is not a studio in which making or designing is the primary content may count as academic.

Beyond the 8 hours of design studio electives and 4 hours of academic elective, the 12 additional hours is any additional course not counted previously in the degree.

The Industrial Design Program Guide/Handbook each year will include a description of how the ID graduate coordinator will develop a plan of study with each student individually and it also provides possible electives and seminars with notations such as “it counts as one of your studio electives.”

The goal with the electives in this proposal is to allow flexibility as much as the Graduate College and NASAD permit, while detailing the requirements of the program and NASAD.

Master of Design in Industrial Design

Program Description and Requirements

Include a course list and catalog descriptions of all courses listed in the program of study, including those from a 'choose from list' for the major. Do not include general education courses that aren't specifically listed in the program of study.

Core course descriptors

ARTD 501 From inquiry to ideation

After a quick benchmarking exercise to determine your current level of design skills, this course focusses 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 on to prototyping of design solutions in resolved design proposals. Due consideration will be given to responsible and sustainable manufacturing. Additionally we will consider communication strategies involving users and other stakeholders

ARTD 503

This course puts all the aspects of the research and design process together into a holistic design project intended as a rehearsal for your Thesis investigations and a beginning to establishing a personal direction for your work

ARTD 504/505/506 Thesis

This sequence covers all stages of the Thesis project development, with 504 being devoted to Research, 505 to Ideation and design investigation and 506 to Implementation and detail execution

ARTD 599 Thesis completion

This academic course covers the production of the written Thesis document which describes the research, investigation and execution of the Thesis project. This is a substantial document which fully describes the process and significance of your thesis work, prior to deposit in the graduate College when it becomes part of the academic record and available publicly. The thesis will normally be submitted at the end of the last semester of attendance

Elective and Seminar Courses

Electives expand your knowledge, and enable you to exploit the resources of the School, College and University including business, art and design, and technology courses. Eight hours of electives must be

approved Design studio electives from the School of Art and Design or elsewhere in the University. You also need to take 16 hours of electives or seminars of which 4 hours must be in an academic course. There are a number of electives in the School available each year, which may be of interest to you.

Elective courses that count toward the MFA graduate requirements must be at the 400 or 500 level. Courses taught only for undergraduate credit, while they may be taken, will not count toward MFA graduation requirements. Students on the three year program will need to do one 400 level course in the School to meet student status requirements although it will not count towards graduation credits. Some Undergraduate Art and Design courses are available to graduate students to do additional work for graduate credit. Courses may be restricted or require prerequisites but talking directly to the appropriate departmental advisor or course instructor can often result in admission. It is also possible to enroll in ARTD 591 Special Problems in Design (2-8 credits) where you study independently with a faculty member.

Seminar courses typically are non-studio classes offered periodically in industrial design and other programs in the School and the University Check with the ID Graduate advisor or the A+D Graduate Office during registration for available seminar courses. This handbook will include a list of possible electives that we will refine, augment and develop over this academic year

An incomplete list of possible electives

SE402 Computer aided product realization

This course is run by the Systems Engineering dept with input from ID Faculty. It introduces you to Autodesk Fusion 360, Scanning and 3D printing, culminating in a design project done in groups comprising ID students and Engineering students. It is available for Grad credit and is regularly taken by ID grad students. It counts as one of your studio electives

ARTD 499 Color materials and finishes

This course aims to explore CMF in the product development process. Color, Material, and Finishing have been critical components in the current design industry. Because of the nature of CMF, 3D visualization skills, and understanding of the design process are essential. Counts as a Studio elective

ARTD 499 Artificial intelligence and design

This course will use advanced technology to explore the possibilities of using AI as an impersonator, collaborator and creator. Students will learn to use the most popular AI tools for art and design and engage in AI-related projects like style transfer, portrait editing, photo and painting restoration, and creative content generation. Beyond utilizing existing technologies, students will also consider

providing insights of AI-Design collaboration to narrow down the gap between AI and Design. Counts as a studio elective

ARTD 270 Design Research Methodology / Seminar

This seminar coordinates readings in design theory and the processes and principles of human-centered design with graduate students' emerging thesis research interests. Students will address the role of design research methodology in establishing design practice and design pedagogy.

ARTD 426 Product Innovation

Presents an overview of the product development process from concept generation to design for manufacturing and project management. The emphasis is on product definition, innovation, the early phases of development, and the designer's role in new product development.

Other courses TBA

Details of the MFA Thesis project

MFA Thesis preparation guidelines ...

Each graduate student in the MFA program is required to complete a Thesis project to fulfil the degree requirements. This normally takes three semesters for the three year program, and two semesters for the two-year program, involving the ARTD 504, 505 and 506 Studios. You also have to produce a written Thesis document which describes your project, submitted to the Graduate College and the School, to be catalogued, deposited and available on line in the University library.

An MFA Thesis project is not just another design studio project. The Thesis project is expected to reflect an area of specialization and to include a research proposition to be evaluated, investigated and demonstrated. The project will begin with a documented survey of appropriate prior designs, with existing research findings from the literature. Your individual research program will generate findings and insights which will form the basis for design innovation. The thesis project will normally have a design outcome demonstrated in the form of drawings, models, prototypes etc. The special knowledge area investigated will serve as the basis for your career development as a professional designer or educator. The Thesis project is an opportunity to take on a design challenge at a significantly higher level than your undergraduate projects, with much higher expectations about depth, rigour, innovation and execution. As it will involve you in at least a year of concentrated work, you should pick the topic carefully and the faculty will assist in that process. As a guide though, we advise you to identify a design problem or opportunity rather than just take on a re-design of an existing product or service.

An important part of the MFA Thesis project is the Thesis document. This will describe your research and design investigations and the outcomes of that process. The thesis document is a written product in which text is supplemented by visual material which can include video and other media. You can refer to catalogued theses in the University on-line library, particularly those in industrial design and architecture, for examples of suitable formats. In a Thesis project, it is required that the work is original and innovative, and that the Thesis project and its documentation be of value to others in furthering work in the particular subject area.

MFA Thesis approval procedures

By the end of the semester before your thesis work commences,(the close of ARTD 503) you will need to have done five things.....

1 Negotiate a Thesis topic

In the semester preceding your Thesis semesters, all thesis students are asked to make a short presentation to the ID faculty on their proposed thesis topic. Following this presentation and a discussion the ID faculty work together with you to define this topic and to form an appropriate committee. The exact nature of the Thesis is negotiated by you with your Thesis committee via the process outlined below

2 Identify a Thesis Committee Chair

The Thesis Committee Chair is your Principal academic advisor, responsible for working closely with you throughout the entire project, providing appropriate direction and advice to you on a regular basis. This includes being the primary contact for review of the written thesis document. Most full-time faculty members will be willing to take on up to two Thesis Committee Chair roles each year. Some faculty with heavy teaching or research loads may not be able to do this and it may not always be possible for you to secure your first choice of Thesis Committee Chair. Selection of a thesis project or topic, securing agreement from a faculty member to be a Thesis Committee Chair, and from the other committee members, is your responsibility.

3 Define the Thesis project

Working with the Thesis Committee Chair, you work to define the thesis project that will be undertaken. The Chair will advise on the selection of the other faculty members appropriate to the thesis research. You then prepare a final proposal of the project/thesis and a detailed work plan complete with an estimated timeline for completion of the various steps of the thesis. The Committee Chair ultimately has to approve the Project topic

4 Form a Thesis committee

At least three faculty serve on the thesis committee, including the Chair. The other two members of your committee will normally play lesser roles but will be asked to attend progress presentations and to review and approve advanced copies of the written thesis. The Chair of the Thesis Committee and one member of the committee must be Industrial design program faculty. The third committee member can be an ID faculty member but more often is an outside expert whose background and experience provides special knowledge supporting the thesis work. While additional committee members may also be asked to serve, the larger the committee, the more difficult it is to schedule

meetings and reviews that all can attend. The full committee will review and approve the proposal and work plan. This stage should be reached before the end of the ARTD 503 class

You will be meeting with your committee every four weeks or so, throughout the thesis semesters, and those meetings should ideally be with the whole committee, not just with individual members. Consultation with Committee members during the summer period will be subject to special arrangements and may prove problematic

5 Complete a Thesis proposal Form

The Thesis Proposal Form is completed at the end of the semester prior to the initial thesis semester. This involves preparing a thesis title (maximum of 10 words), a short thesis statement (maximum of 50 words) and a description of the project and methodology to be used (maximum of 500 words). The Thesis Committee Form should be completed and returned to the ID Graduate advisor at the same time as the Proposal form. Failure to meet this deadline will affect your completion and graduation schedule

We do need to point out that all expenses associated with the Thesis project and the document, e.g., exhibition material, models, drawing material, electronic copies, film, typing, photocopying, telephone, travel, photography, etc., are borne by you

.

Final assessment of the thesis project

A formal presentation of the final thesis project to the ID program faculty is required. This is scheduled by the Graduate Coordinator and will normally include the Visiting Critic, invited by the program in order to give feedback and provide an external view of the program. All faculty and Thesis Committee Members and guests are invited. You are also expected to display your Thesis work in a public Exhibition, usually held in the Krannert Art Museum around early May

This final review of your work at a meeting of your thesis chair and committee will result in a final grade for ARTD 506. Prior to that review, you should have produced the final draft of your Thesis document. You should also have discussed your document with your committee and they will be involved with editing prior to deposit. We encourage all students to complete their Thesis document within the last semester, rather than delay it into the summer.

When you are ready to graduate, you will need to register for graduation through the online [Student Self-Service](#) portal. There are three graduation periods; Spring/May, Summer/August and Fall/December. Each graduation period has a deadline to register for graduation, and a deadline to deposit the Thesis at the [Thesis Office](#). Follow the [formatting guidelines](#) from the Thesis Office: Art and Design does not have any additional formatting rules.

You will be working closely with your thesis committee, especially your chair, to finalize your thesis. You should submit the final and committee-approved version to Ellen de Waard, the A+D Coordinator of Graduate Affairs two weeks before the deposit deadline, for a departmental format review. After passing this format review, Ellen will submit a signed [TDA](#) form to the Thesis Office, which gives you

permission to submit your thesis electronically at the Thesis Office. The Thesis Office will perform another format review. You will then incorporate the suggested changes and deposit your thesis by the final deadline in order to graduate. If you have completed all classes except for ARTD 599 you will be able to participate in the Convocation ceremony but you will not formally graduate until you have submitted your Thesis document. This may affect you starting employment that depends on the award of MFA

We do need to point out that all expenses associated with the Thesis project and the document, e.g., exhibition material, models, drawing material, electronic copies, film, typing, photocopying, telephone, travel, photography, etc., are borne by you.

Guidance notes for completing your ID MFA Thesis document

The Thesis document (sometimes called the Dissertation) is a descriptive and reflexive analysis of the research and design processes you went through for your thesis project. It is an important compliment to that work and also is the means by which your work enters into the academic body of knowledge around Industrial design. The deposit of your thesis with the Graduate College ensures that other researchers and designers can access it and reference it in the future. That is important and sometimes not well recognized. A couple of years ago, I had an enquiry from the Education department of the Tate Gallery in London about a project that I did for them 45 years ago so you never know what will happen.

The Graduate College has copious and well-structured guidance to help Graduate students produce their thesis in the wide variety of disciplines within the university so I encourage you to refer to that and I won't repeat all that here. These notes are specific to ID and should help you in producing the document in the time you have available

The Graduate College guidelines refer to producing an academic document consistent with established academic practice. Every time a design student produces a thesis they ask why it can't be more designerly in appearance, as befits their practice. My advice is to forget that and to bow to convention and produce an academic looking document for deposit. It will be quicker and approval will be faster. You could take the same text and images and produce a separate designerly version for other purposes. Lots of people plan to do that, very few (actually no one) ever does it, mainly because the effort of producing the first one is so draining

First question is always how long and how many words? You should aim for between 15 and 20 thousand words, probably between 90 and 120 pages because you will combine text with images, charts and diagrams (you are all good at that)

The suggested basic structure is simple and follows the sequence below

Summary and abstract

Research question or problem / opportunity addressed

Your research investigations / literature search/ market analysis

Your experiments / surveys / questionnaires
Insights from your research
Ideation and prototyping addressing those insights
Your final design proposals (this may vary with more theoretical theses)
Conclusions and thoughts about future work

In addition to the main text you will usually have appendices containing details of surveys, relevant articles, catalogues etc.

In planning your writing, I find it helpful to identify what kind of writer you are. I believe people in this area fall into one of two types...they are either sculptors or fabricators. Sculptors generate a big mass of words and remove them by editing until they get to the end result they want. Fabricators create a framework and add words to it until they get to the result they want. Sculptors like to produce lots of words initially to reassure themselves that they will have enough in the end, but the end is achieved by throwing lots of words away in the editing process. Fabricators only produce the number of words that they will need so very few are wasted. There is no right way but you should think about which approach suits your character

You should also think about tone and person for the writing. Much academic writing is pompous and impenetrable with jargon. Sometimes, to compensate, students use slang and more informal language to appear more accessible, as well as using the first person as a basis for the writing . Example “ I did this and I thought it was really cool “ Heavy use of the first person gets tiring, as does slang. The use of the royal “we” should be avoided unless there really were more than one of you involved, as in “ we built the prototype and thought it was really cool “ when it was just you involved. I suggest you mix up the persons as in “ experiments were conducted and the results were found encouraging by the participants” Until you are famous, avoid slang in academic documents, even in quotation marks

The editing process will also be heavily dependent on your Thesis committee. They are wise and worldly people who are there to help you so you should call on them and send them stuff. Remember though that they are not saintly and are also busy people. Nothing annoys them more than correcting typos and bad grammar, so try and avoid that. You can use Grammarly or employ a text editor to go through things at frequent intervals. I don't recommend using your friends because they probably won't be friends at the end of the process. There are many PhD students in town who are eager to earn extra money. Try and find one who understands you and also understands design so that you can avoid getting the wrong words correctly spelt.

Your thesis should also include your IRB approval documents (if you don't know what this is, it's too late to find out) and this covers any reference to individuals in descriptions of experiments or interviews. This involves anonymizing responses and images as well as getting permission to use their images. Remember the thesis will be publicly available so confidentiality is important. There is also HIPAA legislation in the US which protects people's medical data and you need to comply with that

You should also check conventions for references, citations and footnotes, as well as for designating quotations. A failure to designate quotations and attribute them properly may lead to accusations of

plagiarism if it appears you are trying to pass off other peoples words as your own. In the design world, this also applies to the design work of others which should be properly credited. You wouldn't like it if it happens to you so be considerate

My advice is to set up a BOX folder, post stuff to it and Invite your committee members as editors so that they can read and edit documents. I find that editable Word documents are the best format to use and Googles docs or PDFs don't work so well. Others may have different preferences. Remember also that much document editing goes on in the summer, when faculty members do many different things, including going on vacation. So they may not be instantly available and they may not be able to respond very well to short deadlines.

It may seem a daunting task but everybody deals with it in the end. Try and enjoy it and it will be less painful. It will probably be the first document of that length that you produce but it probably won't be the last, particularly if you work in academia

Examples from previous ID MFA graduates that would be useful are those produced by Manqian Qian, Ehsan Noursalehi and more recently, Summer Hill so I suggest you get those from the Grad College website via IDEALS. The ref below will get you started with information from the Grad College

<https://grad.illinois.edu/thesis/process>

From: [Shamma, Jeff](#)
To: [Weightman, David Ian](#); [Turner, Nicole Marion Landwehr](#)
Cc: [Goldstein, Molly Hathaway](#); [Sreenivas, Ramavarapu S](#); [Beck, Carolyn L](#)
Subject: Re: Industrial Design MDes proposal
Date: Tuesday, November 8, 2022 11:06:00 AM
Attachments: [image003.png](#)

You're welcome, David. ISE is glad to support the program and fortunate to have Molly as one of our own!

-Jeff

From: Weightman, David Ian <diw@illinois.edu>
Date: Tuesday, November 8, 2022 at 10:02 AM
To: Shamma, Jeff <jshamma@illinois.edu>, Turner, Nicole Marion Landwehr <nicturn@illinois.edu>
Cc: Goldstein, Molly Hathaway <mhg3@illinois.edu>, Sreenivas, Ramavarapu S <rsree@illinois.edu>, Beck, Carolyn L <beck3@illinois.edu>
Subject: Re: Industrial Design MDes proposal

Many thanks Jeff and I know that our students value those courses and the support from Molly. Many thanks for your support

Best wishes

David Weightman MDesRCA, IDSA
Professor / Industrial design
School of Art and Design
Siebel Center for Design Fellow
Professor Technology Entrepreneur Center
University of Illinois @ Urbana Champaign

Room 128 ADB, 408 East Peabody
Champaign IL 61802

Cell 217 778 3752
diw@illinois.edu

From: "Shamma, Jeff" <jshamma@illinois.edu>
Date: Tuesday, November 8, 2022 at 9:48 AM
To: "Turner, Nicole Marion Landwehr" <nicturn@illinois.edu>
Cc: "Weightman, David Ian" <diw@illinois.edu>, "Goldstein, Molly Hathaway" <mhg3@illinois.edu>, "Sreenivas, Ramavarapu S" <rsree@illinois.edu>, "Beck, Carolyn

L" <beck3@illinois.edu>

Subject: Re: Industrial Design MDes proposal

Dear Nicole,

Thank you for your email. This proposal has ISE's approval.

Sincerely,
-Jeff Shamma

.....
Jeff S. Shamma
Department Head, Industrial and Enterprise Systems Engineering
Professor and Jerry S. Dobrovolny Chair
University of Illinois at Urbana-Champaign
Editor-in-Chief, IEEE Transactions on Control of Network Systems
.....

From: Turner, Nicole Marion Landwehr <nicturn@illinois.edu>
Date: Monday, November 7, 2022 at 2:13 PM
To: Shamma, Jeff <jshamma@illinois.edu>
Cc: Weightman, David Ian <diw@illinois.edu>, Goldstein, Molly Hathaway <mhg3@illinois.edu>, Sreenivas, Ramavarapu S <rsree@illinois.edu>
Subject: Industrial Design MDes proposal

To: Department Head, ISE, Jeff Shamma

CC: Associate Head for Graduate Studies, ISE, R.S. Sreenivas and Teaching Asst Professor, ISE, Molly Goldstein

On behalf of David Weightman, Professor of Industrial Design in the School of Art & Design, we request that you review the proposal (attached) for the Master of Design in Industrial Design which suggests MDes ID students may take Design Studio Electives from Art and Design, Architecture, or Engineering. It is expected that 1 or 2 students per year may work with their ID graduate coordinator to identify 400 or 500-level courses for which students meet the appropriate prerequisite skill and knowledge to enroll in. Molly Goldstein has supported this collaboration in SE402 in past years and has written a letter (attached) indicating ID students may enroll in the course in future terms. We provided this letter with the program proposal.

For us to proceed with our curricular changes, the Graduate College has requested that we also have a response of acknowledgement from the Department Head. Please reply at your earliest convenience so this proposal may move forward.

Industrial Design, MDes

Design Studio Electives (from Art and Design, Architecture or Engineering, approved by Graduate Coordinator)

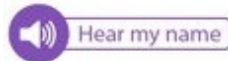
8

If you have any questions or would like additional information, please do not hesitate to contact me.

Thank you for your time and consideration. I look forward to your reply.

Sincerely,

Nicole Turner, Ph.D.



Assistant Dean for Academic Programs and International Education

College of Fine + Applied Arts
University of Illinois at Urbana-Champaign
110 Architecture Bldg, M/C 622
608 E Lorado Taft Dr | Champaign, IL 61820
217.300.2602 | nicturn@illinois.edu | faa.illinois.edu
Schedule BSSD advising appointments at <https://my.faa.illinois.edu/advising/>.

I ILLINOIS

Under the Illinois Freedom of Information Act any written communication to or from university employees regarding university business is a public record and may be subject to public disclosure.

Master of Design, Industrial Design

Faculty Curriculum Vitae

Pages 2-13. Suresh Sethi - Professor & Chair

Pages 14-19. David Weightman - Professor & ID Coordinator

Pages 20-27. Cliff Shin - Associate Professor

Pages 28-32. Carlos Aguiar - Assistant Professor

Pages 33-36. James Kendall - Teaching Assistant Professor

Pages 37-38. Salman Raheel - Teaching Assistant Professor

Pages 39-42. Simrun Sethi - Teaching Assistant Professor

Curriculum Vitae

Suresh Sethi

Professor and Chair, Industrial Design

School of Art + Design

University of Illinois at Urbana-Champaign

+1 (217) 419 4089

sethis1@illinois.edu

ACADEMIC & PROFESSIONAL HISTORY

2017 - Ongoing

University of Illinois, Urbana Champaign

Professor

Administrative Appointment at School of Art + Design

Chair, Industrial Design Program 2020 - Ongoing

Design Research Fellow 2017 - Ongoing

Director, Graduate Program, Industrial Design 2017 – 2020

2011 – 2016

Whirlpool Corporation

Vice President, Global Consumer Design, South House

As head of design-led all design activities in Asia, Asia Pacific, and Australia - with a team of designers in design studios located in Shanghai, China, and Gurgaon, India. Spearheaded the design teams to generate over fifty original designs, winning prestigious design awards and achieving market success. Sales doubled in two years generating additional operating profits revenue of US\$28.5 MN.

Global Director, Global Consumer Design, Air & Water

Head of global design studios for air and water categories, initiated a lean and frugal approach to developing efficient and original products, significantly contributing to corporate profits.

2005 – 2011

Nanyang Technological University, Singapore

Associate Professor

As founding faculty - played a significant role in establishing the first Art, Design and Media School in Singapore and led strategic planning, developing the syllabus, recruiting 50 new faculty globally, and overseeing an annual budget of S\$ 40 million

Administrative Appointment at School of Art, Design, and Media

Co-Director, Center for Social Media Innovation for Communities 2010 – 2011

Director NTU-Domus Academy Program 2008 – 2010

Director, Digital Creativity Center 2008 – 2010

Acting Chair 2008 – 2009

Associate Chair Academics 2006 – 2008

Vice Dean 2006

Lead Faculty, Product Design 2005 – 2008

2003 - 2005 **Indian Institute of Technology, Bombay(IITB), India**
Associate Professor

1990 - 2003 **Circus Design Studio, India**
Founder

A pioneering Industrial Design Consultancy in Western India, providing integrated design services to corporate and Government clients in Industrial Design, Yacht and Boat Design, Retail, Exhibition, and Visual Communication.

Other Appointments as a Design Consultant

Design Manager, ID Point, Italy, 2002 - 2003

Associate Designer, Architect Nari Gandhi, 1989 – 1993

Associate Designer, Scenographer Rajeev Sethi, 1989 – 1993

1988 - 2002 **Visiting Professor**

Taught at several prestigious design institutions in India, focusing on a learning environment that encourages system thinking, engages with design practice, and values industrial design culture.

Appointments at Design Institutions

P.V. Polytechnic, SNDT University, Mumbai. 1989-2002

National Institute of Fashion and Technology, Mumbai. 2000

Indian Institute of Craft and Design, Jaipur. 1998-1999

National Institute of Design, Ahmedabad. 1988-1993

1983 - 1988 **PHILIPS Concern Industrial Design, India/Netherlands**
Designer

As part of a global multi-disciplinary team, I started as a luminares designer and designed several innovative products that were commercially very successful, increasing Philips's revenue and profits significantly. I designed television, professional amplifier systems, retail, and exhibitions.

EDUCATION

Doctor of Philosophy in Design, 2019

Indian Institute of Technology, Bombay, Industrial Design Center, Mumbai, India.

Thesis: A Study on the Role of Narratives in Product Form Visualization.

Received award for Excellence in Ph. D. Research for outstanding research contribution

Master of Design, 1985

Domus Academy, Milan, Italy.

Graduated with distinctions. Thesis: Shoji – a system of lights for computer offices., received Domus Academy Scholarship and PHILIPS Design Scholarship.

Master of Design, 1982

National Institute of Design, Ahmedabad.

Professional Education Program, Integrated Master of Industrial Design, specializing in Product Design. Thesis: Design of Luminaires for miniature florescent lamps, sponsored by Philips Design

ADVISORY BOARD / COMMITTEE APPOINTMENTS

Rishihood University, India 2019-Ongoing

Member of the Board of Studies, School of Creativity

Designing in Dark Times, USA 2018-Ongoing

Member of the advisory board of a small publishing project in New York (linked with Bloomsbury Press in London), *Designing in Dark Times* (primarily based out of Parsons School of Design), whose aim is to develop a small series of polemical essays addressing current crises in the world through the perspectives of designing

Ansal University, India 2014-2016

Member of the Academic Advisory Board, School of Design

India Design Council 2013-2016

Member of the India Design Council: IDC is an autonomous national strategic body of the Indian Government to implement the national design policy and spearhead the strategic design direction to develop design excellence in business, society, and public services.

Ministry of MSME, Government of India 2013-2016

Member of the Advisory Committee of the Ministry of Micro, Small & Medium Enterprises, Government of India Design Clinic. MSME design clinic is a national design intervention to enhance the understanding and application of design and innovation in micro, small, and medium enterprises.

CII - National Committee on Design, India 2011-2016

Member of the Confederation of Indian Industry (CII) National Committee on Design - to promote design as a tool for improving national competitiveness and undertake advocacy of the role of Design in the critical mission of smart cities and digital India.

Universitas Multimedia, Nusantara, Indonesia 2008-2010

Member of the Board of Advisors of the Multimedia Nusantara University, Tangerang, Banten, Indonesia.

School of Design, Singapore Polytechnic, Singapore 2007-2008

Member of the Board of Advisors of the School of Design, Singapore Polytechnic, Singapore.

School of Design, Singapore Polytechnic, Singapore 2007

Member of the Syllabus Validation Panel, Singapore Polytechnic, Singapore.

Ministry of Education, Singapore 2007

Member of the Science and Design Course Panel, Singapore.

ICSID, Helsinki, Finland 1999

Designated as a Global Design Expert by the International Council of Societies of Industrial Designers to contribute significantly to industrial design and designers' representation across political boundaries and economic disparities.

Urban Heritage Conservation, Government of India 1992

Member of the Advisory Committee: An interdisciplinary expert group advising suitable development within the Heritage Regulations framework for Greater Bombay, India.

JURY PANEL

CII Design Excellence Awards, India 2021

Member of the Grand Jury

https://ciidesign.in/index.php/ciidesign/eligibility_categories#jury

Goldreed Industrial Design Award, (GIDA) China

Jury Member <http://www.goldreedaward.com/en/page/expert.html>

IDSA Students Merit Awards 2017-2022

Jury member: IDSA, Students Chapter, Urbana Champaign, USA.

India Design Mark 2011-2016

Jury member: India Design Mark.

Dutch Ministry of Economic Affairs, Netherlands 2009

Design expert member - The Dutch Ministry of Government Affairs, Government of Netherlands funded Product Creation and Realization Program.

Business Week – NID Award, India 2008

Jury member: Business design – NID Award for Social Design.

CYX – International Youth Design Competition, Singapore 2005

Jury member for the Creative Youth Exchange Design Competition - 5 Walls Defying Definitions - at the Gallery Hotel, Singapore.

SIGGRAPH Design Competition, Singapore 2005

Jury member: SIGGRAPH student's chapter

HONORS & AWARDS (Selected)

Indian Institute of Technology Bombay 2019

Award for Excellence in Ph. D. Research for the year 2017-2019 for outstanding research contributions

James Avery Endowed Chair in Industrial Design 2017

Award for distinguished service and significant contribution in the field of Industrial Design

Good Design Award, Japan 2016

Award Category: An Electrical appliance for daily life – Semi Automatic Washing machine.

Good Design Award, Japan 2015

Award Category: An Electrical appliance for daily life – Refrigerator.

IF Design Award, Germany 2014

Award for Whirlpool Ares Combo Washing Machine.

Designomics Award, India 2014

Award for Whirlpool Protton Refrigerator.

Designomics Award, India 2013

Award for Whirlpool Ice Magic Refrigerator.

GRANTS

\$50,000 - Research: Narratives in Design - College of Fine and Applied Arts, University of Illinois, Urbana Champaign. Principal Investigator. 2017 – 2022

\$50,000 - Research: Wearable Design - James Avery Endowment Fund. Principal Investigator. 2017-2022

\$25,000 - Research: Usability and Mobile Technology, funded by Intel, USA. Co-Investigator, 2011,

\$50,000 - Research: Forms of Everyday Asia, funded by Digital Creativity Center, Nanyang Technological University, Singapore. Co-Investigator. 2009

\$10 million - International Research Center: COSMIC – Center for Social Media Innovations for Communities, funded by Media Development Authority, Singapore. A joint center of Nanyang Technological University, Singapore, National University of Singapore, and Indian Institute of Technology Bombay, India, Principal Investigator, and Co-Director. 2009 - 2014

\$50,000 - Research: Interactive games, funded by Digital Creativity Center, Nanyang Technological University, Singapore. Principal Investigator. 2008.

INR500,000 - Research: Daylight versus Artificial light, funded by the Indian Institute of Technology Bombay, India. Principal Investigator. 2004.

INR 500,000 - Research: Maritime History of India, funded by the Vasant Sheth Foundation, India. Principal Investigator. 2003.

RESEARCH CREATIVE OUTPUTS

THESES

Ph.D. Thesis: Sethi, S. A Study on the Role of Narratives in Product Form Visualization. (Ph.D. Thesis) Mumbai: IITB, Industrial Design Center, India. 2018

Master's Thesis: Sethi, S. Shoji: A System of Lights for Computer Offices. Milan: Domus Academy, Italy. 1985

Diploma Thesis: Sethi, S. "Design of Luminaires for Miniature Fluorescent Lamps.": National Institute of Design, India. 1982

BOOKS

Sethi, S. eds. Light Shines, Light Reflects, Nanyang Technological University, Singapore. 2010 ISBN: 978-981-08-5809-4

Singh, C., Sethi, S., Perheentupa, H. Gadhi Lohars & Kumbhars of Jawaja, National Institute of Design, India. 1992 Library of Congress HD8039.B52 144

CATALOGUES

Sethi, S. eds. Forms of Everyday Asia, Nanyang Technological University, Singapore. 2009 ISBN: 978-981-08-5830-8

Sethi, S. eds. Mukai Katsumi, Nanyang Technological University, Singapore. 2009 ISBN: 978-981-08-5830-5

BOOK REVIEWS

Design and Culture: A Transdisciplinary History, Purdue University Press, IN, USA. 2019 ISBN: 978-1-6124-9624-5

Muratovski, G., Research for Designers: A Guide to Methods and Practice, Sage Publications Ltd. London. 2016 ISBN: 978-1-4462-7513-9

CREATIVE WORKS / EXHIBITIONS (Selected)

Exhibition: Sustainable Future: Every Design Tells a Story, Gwangju Design Biennale, South Korea October 15 – December 15, 2015 (Invited)

Workshop: 'Sustainability and Product Design' - IITB, Mumbai, India In a Planet of Our Own, a sustainability vision focused on water. December 2, 2015 (Invited)

Exhibition: Credenza Refrigerator, Whirlpool Pavilion. CES, Las Vegas, USA. January 7th -10th. 2014

Group Show: 7th. International Art Festival, Rajamangala University of Technology, Rattanakosin. Chiangrai, Thailand. February 8 -28th. 2011 (Invited)

Group Show: 6th. International Art Festival, Rajamangala University of Technology, Rattanakosin. Chiangrai, Thailand February 15 – March 17· 2010 (Invited)

Exhibition: Forms of Everyday Asia - A collection of everyday pots from eight Asian countries. Design Singapore Festival, Singapore November 20 - December 15, 2009.

Workshop: 'Singori' - Workshop on Sustainability and Food Packaging: In a Planet of our Own – a sustainability vision across six continents IITB, Mumbai, India. September 18, 2009 (Invited)

Group Show: 5th International Art Festival, Rajamangala University of Technology, Rattanakosin, Chiangrai, Thailand, June 10 – July 3, 2009. (Invited)

Group Show: 100% Make-Up, Gemeente Museum, Den Hague, The Hague, Netherlands, March 15 - October 12, 2008

Group Show: 3rd International Art Festival, Rajamangala University of Technology, Rattanakosin, Chiangrai, Thailand, April 18 – 23, 2007 (Invited)

Exhibition: Real-Unreal: Light Installation, That's Design – Salone Di Mobile, Milano, Italy April 18 – 23rd, 2007 (Invited)

Exhibition: Surprise: Interactive Light Object - Domus Academy, Milano, Italy. April 18 – 23rd, 2007 (Invited)

Exhibition: Recycle – Sustainable Lamps and screens of recycled paper fabric. IITB, IDC, Mumbai, India March 27, 2005

KEYNOTE / PANELS / CONFERENCE ORGANIZER (Selected)

Session Chair and Presenter at the International Conference on Research into Design, ICoRD'21, Jan 7- 10, 21. IDC School of Design, IIT Bombay, India. 2021 (Invited – Online)

Session Co-Chair and Presenter at the 11th International Conference of Applied Human Factors and Ergonomics, AHFE, San Diego, California, USA, July 16-20, 2020, (Invited-Online)

Session Co-Chair, Kansai Engineering, International Conference on Applied Human Factors and Ergonomics, AHFE. Washington D.C., USA July 24th-28th, 2019. (Invited)

Session Chair: International Conference on Applied Human Factors and Ergonomics, Interdisciplinary Practice in Industrial Design, AHFE, Orlando, USA, July 27th-29th, 2018. (Invited)

Global Keynote Speaker, Converge 2016, Organized by Altair at ITC Gardenia, Bangalore, India. November 15, 2016. (Invited)

<http://event.converge2016.com/india>

Keynote Panel: The Economic Times Design Summit, Mumbai, India, May 29, 2015 (Invited)

<https://www.corecommunique.com/the-design-summit-2015/>

Inauguration Panel: Alessandro Mendini, Toyo Ito, Stefano Giovannoni, Suresh Sethi, Gwangju Design Biennale 2015, Gwangju, South Korea October 15, 2015 (Invited)

Keynote Panel: What's Next Symposium - the Future of Design, Pearl Academy at the Leela Ambience, Gurgaon, India. November 20, 2014 (Invited)

Keynote presentation "Be the Change," Design for a Billion Conference, Indian Institute of Technology, Gandhinagar, India November 7 – 9th. 2014 (Invited)

Roundtable panel: The Design Success Summit. Portman Ritz-Carlton, Shanghai, China. October 11, 2014 (Invited)

Keynote panel: Good Design Forum, India Design Mark, India Habitat Center, New Delhi. June 30, 2014. (Invited)

Keynote presentation –Future Past - DDS, De-Construct, VMCC, IITB, Mumbai. June 27 – 29th. 2014. (Invited)

Keynote presentation: The Next Big Idea, CXO, Altair, Pune, India 2014 (Invited)

Keynote presentation: Sustainable Packaging and Design, International Packaging Conclave, Jaypee Greens Golf and Spa Resorts, Noida, India. October 5, 2014. (Invited)

Roundtable Panel: Symposium: Craft and Industry, Thomas Froehlicher, Hans Maier-Aichen, Massimo Morozzi, Suresh Sethi, Alexander von Vegesack, Reciprocity Design Biennale, Liege. October 5, 2012. (Invited)
<https://www.yumpu.com/fr/document/read/26945201/tales-of-heroes-reciprocity-2012/153>

Roundtable Panel: Design Education Forum, Design Singapore Council Singapore. 2008. (Invited)

Session Chair: Design Experience Seminar, Industrial Design Center, Indian Institute of Technology Bombay, Mumbai, India. June 9, 2008 (Invited)

Co-Organizer: Z Node Mini-Symposium with SWISSNEX and School of Art, Design, and Media, NTU, Singapore. July 24, 2008

Organizer: The Way of Asian Design Seminar, School of Art, Design, and Media, NTU Singapore. Organizer. 2007

PUBLICATION / PRESS (Selected)

Sethi S. Narrative – A Vehicle to Generate Product Form. In: A. Chakrabarti et al.(eds.) Design for Tomorrow – Volume 3, Smart Innovation, Systems and Technologies, vol 223 Springer Nature, Singapore. 2021 https://doi.org/10.1007/978-981-16-0084-5_12

Thomas J., Windham J., Sethi S., Arora M. (2020) Exploring a New Future in Collaborative Design Processes in Education. In: Shin C. (eds) Advances in Interdisciplinary Practice in Industrial Design. AHFE- Advances in Intelligent Systems and Computing, vol 968. Springer, Cham 2020 pp. 173–184. https://doi.org/10.1007/978-3-030-20470-9_19

Sethi S., Sethi S. Personal Experience in Concept Generation of New Products. In: Markopoulos E., Goonetilleke R., Ho A., Luximon Y. (eds) Advances in Creativity, Innovation, Entrepreneurship and Communication of Design. AHFE - Advances in Intelligent Systems and Computing, vol 1218. Springer, Cham. 2020. pp 169 -174. https://doi.org/10.1007/978-3-030-51626-0_20

Sethi S., The Role of Narratives in Visualizing Product Form” In Fukuda, S. (eds.), Advances in Affective and Pleasurable Design, AHFE 2019. Advances in Intelligent Systems and Computing, vol 952. Springer, Cham. 2019. pp. 289–299. https://doi.org/10.1007/978-3-030-20441-9_31;

Sethi S., Singh, C.V., Kumbhars of Jawaja, Between Chairs - Design Pedagogies in Transcultural Dialogue, Regina Bittner, et al. Spector Books, Bauhaus Foundation, Dessau. 2017 pp 22, 85, 86,87 89

Sethi, S. Calligraphic Landscape. A Gentle Dance of Letters. Simonetta Ferrante, Silvana Editoriale 2016. pp 235.

Converge 2016 gets engineers, designers and scientists talking tech, by Kiran Bajaj, Online Magazine: Autocar Professional, November 22, 2016. http://www.autocarpro.in/news-national/converge-2016-engineers-designers-scientists-talking-tech-22668?utm_campaign

Alumni story'01: Suresh Sethi' All Designers Tell Stories, the India Design Project August 28, 2016,

The Poetry of Design' DDP, M1 Exhibition Hall, Seoul, South Korea, October 9, 2015. Artwork 75 and Photo for 100% Make-Up.

Credenza Refrigerator, CES, Las Vegas, USA: 2014 <https://www.youtube.com/watch?v=CDNRZz7Xwn8>

Seeking Simple Solutions' Pool Design magazine 37 July 2013 pp 30-41 https://issuu.com/poolmagazine/docs/pool37-for_web

Sethi, S. Resurgence by Design' Preface, The Way of Asian Design, NTU, 2010. pp 7-11

Sethi, S. Avanti Veloce- con Il Design' Gap Design, April 15- 2009 pp 44-47

Sethi, S. Space – Play: Light as Architectural Matter, Edizioni Poli. 2008.pp 91-98

Sethi, S. Light - Play' Politecnico di Milano, Italy. 2008. pp 262-268

Michael C. Hawker, 'Celebrating the Life and Work of Nari Gandhi,' 'Friends of Kebyar' Vol 23.1, issue no 72, USA. 2007. pp 35, 48, 52

Sethi, S. Designing for Rural India Designing Designers, Edizioni Poli Design. 2007. pp 51-57

Sethi, S. Designing a Memory Container Innovation Vol. 7, No 2, 2007. pp 62-63

Sethi, S. 'The Responsibility of Designer' Impact Contenitori e Contenuti. pp 96-97

Sethi, S. 'The Great Indian Pie' Impact Contenitori e Contenuti, 1/2007. pp 69-75

Sethi, S. 'Blossoming Gap' Designer issue 12, 2006. pp 24-25

Aldo Cibic' Perchè Design by Cibicworkshop: Suresh Sethi' online
https://www.youtube.com/watch?v=uysA_KurDyc

Alberto Lecadano' Il Pittore di Insegne' Progetto Grafico No 7, Gennaio 2006. pp 132 135

Virginio Briatore' O Design na India' Revista Florence. 2005. pp 58-63

Virginio Briatore' Restyling' Castelvechi. 2000. pp 146

Virginio Briatore' Il Candidato Indiano' Edizioni Leucasia, 1998 pp 18-19

Alberto Alessi' The Dream Factory Alessi Since 1921' Konemann. 1995. pp 68-69

Virginio Briatore' Si Fatta Luce' Modografie, 1995. pp 4-5

Bhakti Chuganee 'Wow, what a Dhow' Economic Times June 19, 1995

Virginio Briatore 'Appunti da Passaggio in India' Modo 164, Maggio. 1995. pp 43-45

Nilama Kagal, 'Young Designers: Bombay' Indian Architecture & Builders September 1995 pp 134 136

Alessandro Mendini 'La Fabbrica Estetica' Alessi. 1992. pp 201, 379

Hugh Aldersay Williams' World Design' Rizzoli 1992 pp 118-127

Sethi, S. Design in India - Un mondo in Divinire Modo 120 Gennaio 1990. pp 44-51

'La Luce in Gioco' Domus Magazine September 1985 pp6

CONFERENCES / LECTURES (Selected)

Emotional Design: The power of narratives, Indian Institute of Technology, Bombay, Industrial Design Department, Mumbai, India, October 24, 2021 – Online (Invited)

Narrative as a Vehicle to Generate Product Form, 8th International Conference on Research into Design, ICoRD'21, IDC School of Design, IIT, Bombay, January 7-9, 2021

Exploring the Essence of Narrative in Visualizing Product Form, International Symposium on Automation, Information, and Computing (ISAIC), Jiaotong University, Beijing, China, December 2-4, 2020, Online. (Invited)

Northeastern University, Boston, USA. November 8, 2019 (Invited)

Future Factory, Mumbai, India. July 3, 2019 (Invited)

Design Education Symposium, IITB, Mumbai, India. 2019. (Invited).
<http://www.dsource.idc.iitb.ac.in/dportal/des19/>

Indian School of Design and Innovation, Mumbai, India. January 7, 2019.
(Invited)

Insight 2015, Design Research Symposium, NID, Bengaluru, India January
23rd-24th. 2015

E Light Experiencing light Conference on Design, CODE 2015. (Invited)
https://www.youtube.com/watch?v=6Sd_sS5jvkg

Spot Workshop, Kookmin University, Seoul, S. Korea. November 3, 2014.
(Invited)

Product Skin - Trends in Asia, DK Dongshin, Seoul, S. Korea. November 4.
2014. (Invited)

Create Desire, FICCI, New Delhi, India November 29, 2012. (Invited)

Design Innovation - Asian Experience, CII-NID Summit, India. December 8,
2011. (Invited)

Asian Design - New Landscape, PDMA, SMU, Singapore. October 15, 2009.
(Invited)

Memory Containers, IRF Challenges, and Opportunities, Port, Portugal. July
24-28, 2009.

Design Principles and Practice Conference, Berlin, Germany Feb.15, 2009

The City Never Sleeps, NABA, Milan, Italy April 19, 2008

10th. Generative Art Conference, Politecnico Di Milano, Italy Dec.12, 2007

Designing Lamps, Sabanci University, Istanbul, Turkey. November 20, 2006
(Invited)

Designing for Rural India, Designing Designers, COSMIT, Milan, Italy.
April 24, 2006. (Invited)

Tradition and Modernity in Emerging Scenarios, Design Singapore Festival
November 10-12, 2005.

Role of Memory, Intuition & Experience in Design, DETM, India. March 2-
4, 2005.

UNIVERSITY SERVICE

University of Illinois, Urbana Champaign, IL

Executive Committee, School of Art + Design – Member
Graduate Committee, School of Art + Design – Member
MFA, Industrial Design program, School of Art + Design - Director
Graduate + Ph.D. new program development committee – Member
BFA Interactive Design new program development committee - Member
Siebel Design Center Director Search Committee - Member

Nanyang Technological University, Singapore

College Promotion & Tenure Committee – Member
NTU Museum Committee - Member
URECA Committee - Member and School Coordinator
Alumni School Coordinators Committee - Member
Tan Teo Scholarship Interviews - Panel Member
Teaching Excellence Fund Committee – Member
University Research Committee - Member
University Convocation Committee - Member
University Convocation Committee - Member
New Campus Landscape Committee - College Rep.
National Research Foundation -Dean's Rep.
ADM Chair Search Committee - Member

School of Art, Design, and Media, NTU, Singapore

Chair's Advisory Committee – Member
Reappointment Committee – Chair
Recruitment Committee – Member
Admission and Outreach - Coordinator
BFA Curriculum Committee – Member
Master of Arts Interactive Design Curriculum Committee – Chair
Product Workshop Committee – Member

Indian Institute of Technology Bombay, Mumbai, India

M. Des. Interaction Design Curriculum Committee – Member
Ph.D. program Curriculum Committee - Member
Academic Advising: Graduate Program - Member

Professor David Weightman MDesRCA IDSA graduated from the Royal College of Art, London in 1970 with a Masters degree in Industrial Design Engineering. His career has combined working in Higher Education, latterly in Senior Administrative positions, with research and consultancy activities.

Until 2007 he was the Director of the School of Art + Design at the University of Illinois @Urbana-Champaign, where he continues as a Senior Faculty member in the Industrial Design program. Prior to that he was the Dean of the School of Art + Design at Staffordshire University in the UK, following a number of years teaching on the renowned Industrial Design Transport program at the (now) Coventry University.

Whilst at Coventry and Staffordshire he was a consultant to companies including Yamaha, Massey Ferguson, British Rail, BBC television and the Tate Gallery, including a period running the Industrial Design Consultancy Unit at Coventry. His early consultancy and research work was in Intermediate Technology for Developing countries, and then in user-centred product design. His current research is in the relationship between products users and the design/manufacturing process, particularly the new relationships enabled by digital technology.

In Education, he has acted as advisor to the British Design Council, the Council for National Academic Awards, and the Department of Trade and Industry, participating in many program validations and research projects. He was a member of the Executive of the Council for Higher Education in Art and Design (CHEAD) and has presented papers and run workshops for the National Association of Schools of Art and Design (NASAD), the US equivalent, since moving to the US in 2004. In 2011 he was elected District Vice President for the MidWest district of the Industrial Design Society of America (IDSA) and served as a member of the Executive board for IDSA from 2011 till 2015

Higher education (year of graduation)

1970	MDes RCA, Royal College of Art, London
1968	BDes RCA, Royal College of Art, London

Employment record

2007 to date / Professor/Industrial Design School of Art and design UIUC

2004 - 2007 / Director, School of Art + Design, UIUC

1992 – 2003 / Dean, School of Art and Design, Staffordshire University

1989 – 1992 / Head of Department of Design, Staffordshire Polytechnic

1985 – 1989 / Principal lecturer, Product design, North Staffordshire Polytechnic

1983 – 1985 / Director, Industrial Design Unit, Coventry Polytechnic

1973 – 1985 / Senior lecturer, Industrial design transport, Lanchester Polytechnic, Coventry

1971 – 1973 / Lecturer, Foundation studies, Cardiff College of Art

1969 – 1970 / Designer, Industrial Design Centre, Indian Institute of Technology, New Delhi

Current class load

ARTD 302 Junior studio

ARTD 502 Graduate studio 1

ARTD 426 Product Innovation

ARTD 230 / TE 230 Design thinking / need finding for Technology Entrepreneur Center

BADM 366 Product development for Technology Management Program

SE 402 Digital prototyping for General Engineering curriculum , with Jim Leake

Design awards

1977 Design and Industry Association Melchett Memorial award (with Ian Barwell) for the design of a CKD bicycle/tricycle

Professional activities

2016 Appointed Faculty Fellow Autodesk LLC

2014 IDEA Studio Scholar Autodesk LLC San Francisco

2010 Elected District Vice President of Industrial Design Society of America (IDSA), for MidWest District, with IDSA Board position

2008-10 Invited participant in National Science Foundation workshops on future of Graduate Engineering education, VA, MI, IL, CA

2008 Appointed iFoundry fellow, UIUC College of engineering

2008 Appointed external moderator for ID program, NUS Singapore

2008 Appointed External Monitor for Masters of Design by Project program, Unitec, Auckland, New Zealand

2008 Invited to be member of National working group on the future of Design Education for NASAD (National Association for Schools of Art and Design),

2007 Leader, X-lab Creativity workshop, for A*STAR Singapore, August

2004 Member Industrial Design Society of America

2002 - 2003 Member of Steering group, North Staffordshire Design Initiative

2002 - 2003 Member of the Design Research Society

2002 - 2003 Reviewer for the Design Journal

2001 - 2002 Reviewer for the 3rd Design and Emotion Conference (2002) Loughborough, UK

2001- 2004 Member of North Staffordshire Design Forum

2001- 2004 Member of Design Action team, Ceramic Industry Forum

2000 - 2003 Elected Executive member Council of Higher Education in Art and Design (CHEAD)

1995 Elected Fellow Chartered Society of Designers

1994 – 1997 Member of editorial board CoDesign journal

1993 Specialist advisor 3D Panel CNAAs (Council for National Academic Awards)

University service

2017 Appointed Fellow, Siebel Center for Design (SC4D)
2017 Member Advisory Board LAS Designing your life Initiative
2017 Appointed Professor, Technology Entrepreneur Center
2017 Appointed 0% Faculty member Carle Illinois Medical school
2014- 2018 Member of Core Planning committee and Executive committee for SC4D
2008 Appointed I-foundry fellow, UIUC College of Engineering
2012 – to date Member Entrepreneurship Round table

Consultancy experience

2015 Consultant to Mimosa Acoustics on Hearing protection project for US Navy
1989 Exterior styling, production tooling design and construction for body work of AMI and Knype buses for Potteries Motor Traction Engineering, Stoke-on-Trent
1987 Design concepts and design team focus groups to develop the Tough Terrain and Conveyancer lift trucks for Coventry Climax Ltd, Coventry
1986 Design of training aids and manuals for improved parts handling processes for Caterpillar UK, Leicester
1986 Design and construction of special effects model sets for television productions of Alice in Wonderland and Red Dwarf for BBC TV, London
1985 Ergonomic studies, cab design and safety labels for 300 series tractor for Massey Ferguson Ltd, Coventry
1984 Design of aids and production centres for SPC training, Torrington International, Coventry
1981 – 1983 Design concepts, ergonomic rigs and user studies for projected double-decker rail coach for British Rail Research, Derby
1982 Design studies for baggage trolleys for British Rail International, London
1982 Design and prototyping of fairing for Yamaha XS1100 motorcycle with associated aerodynamic test programme at MIRA for Yamaha Europe, Amstelveen
1981 Design of cab interior for Trantor high speed tractor, for Trantor Ltd,
1979 Design of a car seat belt adaptor (in conjunction with Institute of Consumer Ergonomics, Loughborough University), for the Colostomy Association, London
1978 Investigation of adapted production vehicles for paraplegics as alternatives to existing Department of Health motortricycle, for Trike Users Association, Bansted

1973 – 1976 Design of interactive educational exhibitions for children, installed as Tate Kidsplay 1, 2 and 3 exhibitions for the Education department, Tate Gallery, London (including installation in Melbourne, Australia)

Research Projects

2015 Project funding to support interdisciplinary course development Autodesk LLC \$30K
2008 Designmatters Reading group, IPRH funding \$500
2007 - 2012 Special funding from Provost, Deans of Engineering and FAA to support
“Raising awareness of design thinking “ including Designmatters lecture series,
2005 Campus Research Initiative grant for feasibility study Intermedialab \$40K
2001-2004 Design awareness seminars, International design competition and Design
advisory network projects within “Leading by design” project for Ceramic
Industry Forum, funded by DTI. Total project funding £1800K over five years
2001 Skillbase – a study of technical skills instruction in UK Art and design educational
institutions for ADC-LTSN (Art and design subject centre) Project funding £5K
2000 North Staffordshire Design Initiative report for the North Staffordshire Partnership and
Advantage West Midlands £50K
1999 In company design awareness programme for GKN Technology, funded by DTI £7.5K
1990 Guidelines for collaboration between design colleges and industry, funded by Design
Council £2.5K
1989 Study into business awareness of students on UK design courses, funded by CNA
1982 Ergonomic data manual for designers, Coventry Polytechnic
1978 Wheelbarrow ergonomics study funded by Intermediate Technology Development
Group (ITDG)
1975 Study of future applications of pedal power in developing countries, funded by ITDG

Publications

Refereed Conference presentations and publications

Weightman D, Monzel-Hughes K, Davis M, Anderson E (2010) Design futures2, NASAD National conference, Seattle, October

Weightman D, Monzel-Hughes K, Davis M, Anderson E (2010) Design futures, NASAD National conference, Cincinnati, September

Weightman D (2010) What murdering, ratrodding, pimping and hacking mean for Industrial design practice, IDSA National conference, Portland, August

Weightman D, (2009) Design thinking WTF, European Academy of Design conference, Aberdeen , April

Weightman, D (2008) Workshop on conferences in a Web 2.0 world, IDSA National Education conference, Phoenix, September

Weightman D and McDonagh D (2007) Users connecting with the design process: Has the paradigm shifted? In International Council of Societies of Industrial Design + Industrial Design Society of America Educators' Congress. San Francisco, October 2007 (in press).

Weightman D and McDonagh D (2006) The New Landscape of Design Business: Key Directions of Design Education.

Hatch P and McDonagh D (eds.)(2006) REALIZE: Design Means Business. Chicago: Industrial Design Society of America.

Weightman D and McDonagh D (2006) The new landscape of design: cool hunting and other opportunities Industrial Design Society of America annual conference, Austin, Texas, September.

McDonagh D, Formosa D, Fulton Suri J and **Weightman D** (2005) Product Design: Impact on the Ageing Individual. The 1st World Ageing and Generations Congress 2005, St Gallen, Switzerland, October 2005. pp. 237-247.

Weightman, D (2005) "Developing a research culture in art and design education" Annual conference of National Association of Schools of Art and Design, Philadelphia (October)

Weightman D and McDonagh D (2004) "Developing Industrial Design, a British perspective." IDSA Education Conference, Pasadena (October)

Weightman D and McDonagh D (2003) "If kettles are from Venus and televisions are from Mars, where are cars from?" The European Academy of Design conference, Barcelona,

Weightman D and McDonagh D (2003) "People are doing it for themselves". Designing pleasure in products conference, Carnegie Mellon University, Pittsburgh, USA (June)

Weightman D and McDonagh D (2002) "In the future, will design be just for you?" In the conference proceedings of the Universal Design 2002 Conference, Yokohama, Japan (November)

Weightman D (1995) "Obsession, enthusiasm etc" for the Participatory design conference, Brighton University

Weightman D (1995) "Obsession, enthusiasm and interaction in the design process" Co design 3, ISSN 1355 302X

Working papers on cycle trailer design and wheelbarrow design for ITDG, London

Weightman D (1983)The XS1100 project, Design magazine

Weightman D (1983) “The Speedy”, Bicycle magazine (September) pp.32-39

Current research interests

Design thinking , enterprise development, participatory design, customisation, CAD

David Weightman / Professor ID / UIUC / April 16, 2019

Cliff Shin

Associate Professor of Industrial Design
University of Illinois at Urbana Champaign
thecliff@illinois.edu

Education

- May 2004 **Purdue University**, West Lafayette, IN
Master of Arts in Industrial Design - Studio track
- Dec. 2001 **Arizona State University**, Tempe, AZ
Bachelor of Science - Manufacturing Engineering Technology
- Jan. 2001 - May 2002 **Arizona State University** - Tempe, AZ
Industrial Design

Academic Experience

- May 2016 – Present **Associate Professor of Industrial Design**
University of Illinois at Urbana and Champaign / School of Art and Design
- July 2013 – Dec. 2021 **Affiliated Faculty in Cognitive Neuroscience Research Group**
Beckman Institute for Advanced Science and Technology
- July 2010 – May 2016 **Assistant Professor of Industrial Design**
University of Illinois at Urbana and Champaign / School of Art and Design
- July 2008 – May 2010 **Assistant Professor of Industrial Design**
Kansas State University
Department of Interior Architecture and Product Design
- Jan. 2004 - May 2004 **Graduate Instructor of Interior Design**
Purdue University at West Lafayette, IN

Honor

- July. 2014 **IDSA Young Educator of the Year Award**,
By Industrial Design Society of America (IDSA).

Professional Experience

- Jan. 2021 – Present **Head of Industrial Designer – Saddleeye Inc.**
 - Designing AI operated bicycle rear-camera.
- Aug. 2018 – Dec. 2018 **UI/UX Consulting - LG Electronics USA.**
 - UI/UX for LG Mobile - researching and developing the next generation of.
 - 5G/IoT Concept development
- April 2013 – Nov. 2016 **Director of Industrial Design – the product manufactory**
Directing design strategy and design in product development for the clients.
- May. 2014–Sept. 2014 **Industrial Design Consulting - LG Electronics USA.**
Developing and Designing Kitchen Appliances including refrigerator, Gas Range, Washer, and Dryer for North American Market and user research for LG Electronics USA.
- July 2004 – July 2008 **Senior Industrial Designer & Assistant Manager**
LG Electronics Headquarter Design Center - Seoul, Korea
 - Designed concept vacuum machine for North American market
 - Designed 4.0 cu/ft-capacity front load washer (WM2455HH)
Launched in local Sears store in Aug. 2007
Received 4.6 stars out of 5 from Sears customer rating

By adding this model, LG washer achieved No. 1 U.S. market share

- Designed 4.0 cu/ft Capacity front load washer (WM2688HNM)
Launched in local Best Buy and Home Depot in March 2006
Received 5 stars from Best Buy customer rating
Selected as “Best Buy” in *Consumer Reports*
- Assisted manager for department design management
Establishing design strategy
- Advisor/Juror
Mentored interns and judged interns final presentations
- Participated in LCD computer monitor project as an assigned designer
Designed a concept LCD computer monitor
- Task member of “Design Team of the Year” by Red Dot Award, Germany

International Jury

Jan, 2022	Asia Design Prize, Seoul, Korea
Jan, 2021	Asia Design Prize, Seoul, Korea
Jan, 2020	Asia Design Prize, Seoul, Korea
Jun 2010	23 rd Appliance Design Annual Excellence in Design
Jan, 2010	IHA SDC by International Housewares Association, Chicago, IL.

International Awards

Aug. 2021	2021 IDEA award , Finalist, “FoveAI, AI Powered Rearview Camera for Micro-mobility,” Cliff Shin
Aug. 2021	The European Product Design Award, Winner , “FoveAI, AI Powered Rearview Camera for Micro-mobility,” Cliff Shin
July 2021	Red dot Concept Design, red dot winner , “ <i>Opulent</i> ”, Cliff Shin
July 2021	Red dot Concept Design, red dot winner , “FoveAI, AI Powered Rearview Camera for Micro-mobility,” Cliff Shin
May 2021	2021 DNA Paris Design Awards, Grand Prix- Product Design of the Year 2021 , “FoveAI, AI Powered Rearview Camera for Micro-mobility,” Cliff Shin
May 2021	2021 DNA Paris Design Awards, Winner , “Candle Cradle” Cliff Shin
April 2021	The MUSE Design Award, Gold , “FoveAI, AI Powered Rearview Camera for Micro-mobility,” Cliff Shin
Jan 2021	The 14th International Design Awards, Gold , “ <i>Elan, Children's Mouth Exam Device</i> ”, / Cliff Shin & Adele Rehkemper, > Jury Comment, “ Conceptually this is a great concept and anticipate it... ” by <i>Melissa Sterry</i>
Jan 2021	The 14th International Design Awards, Gold , “ <i>Umbra, The Black Label Series</i> ” / Cliff Shin & Adele Rehkemper > Jury Comment, “ Beautiful and elegant design ” by <i>Melissa Sterry</i>
Jan 2021	The 14th International Design Awards, Silver , “ <i>Opulent, Modern Kitchen Utensils</i> ”, / Cliff Shin & Adele Rehkemper > Jury Comment, “ Elegant and original design. ” by <i>Melissa Sterry</i>
July 2020	The European Product Design Award, Winner , “ <i>Elan, Children's Mouth Exam Device</i> ” / Cliff Shin & Adele Rehkemper
July 2020	The European Product Design Award, Winner , “ <i>Umbra, The Black Label Series</i> ” Cliff Shin & Adele Rehkemper
July 2020	The European Product Design Award , Honorable Mention, “ <i>Opulent</i> ” / Cliff Shin & Adele Rehkemper
July 2020	The European Product Design Award , Honorable Mention, “Candle Cradle” / Cliff Shin

- April 2019 **A' Design Award**, Bronze, "*Opulent, Kitchen Cooking Utencils*" / Cliff Shin & Adele Rehkemper / Milan, Italy
- April 2019 **A' Design Award**, "*Elan Children's Mouth Exam Device*" / Cliff Shin & Adele Rehkemper / Milan, Italy.
- April 2015 **A' Design Award**, Silver Award, "*Embrace, Myoelectric Prosthetic Hand,*" Milan, Italy.
- April 2015 **A' Design Award**, Silver Award, "*Illume, 3D printable Prosthetic Hand,*" Milan, Italy.
- Sept. 2014 **LG Open Innovation**, LG Electronics USA, First Place, Englewood Cliffs, New Jersey.
- April 2014 **A' Design Award**, "*Intelligente Helmet,*" Milan, Italy
- April 2014 **A' Design Award**, "*Boutique Fire Extinguisher Housing,*" Milan, Italy
- April 2014 **A' Design Award**, "*Nouveau Toilet Bowl,*" A' Design Award 2014, Milan, Italy,
- April 2014 **A' Design Award**, Bronze A' Design Award, "*Rendezvous Stemware,*" Milan, Italy
- April 2014 **A' Design Award**, Silver A' Design Award, "*Avviare Ankle Foot Orthosis,*" Milan, Italy
- May 2013 **Red dot Design Award**, Finalist, "*Lollipop*" *Tongue Cleaner for Kids*", Singapore.
- May 2013 **IDEA 2013**, Finalist, "*Lollipop*" *Tongue Cleaner for Kids*", Dearborn, Michigan.
- April 2013 **A' Design Award**, Silver, "*Lollipop*" *Tongue Cleaner for Kids,*" 2013, Milan, Italy
- Dec 2012 **Consumer Report "Best Buy"** - *210 Series Front loading Washer*
- Aug. 2012 **Spark Concept Design Award**, Finalist, "*Rescue Pack*"
- Aug. 2012 **Spark Concept Design Award**, Finalist, "*Neavou*"
- April 2011 **Red Dot Concept Design Award**, Finalist, "*Rescue Pack*"
- Dec. 2010 **International Furniture Design Award**, Semi-Finalist, "*Neavou*" Singapore
- Sept.2010 **Seoul International Design Olympiad**, Short List, "*Melody for Everyone*"
- Dec. 2006 **Good Design(G.D) Award** by KIDP, M.O.C.I.E. Award
The Ministry Of Commerce, Industry, and Energy, Korea
- May 2006 **Good Design (G.D.) Award** by KIDP
Korea Institute of Design Promotion, Seoul, Korea
- Jan. 2004 **MACEF Design Award**, Milan, Italy: *Selected Work*
- May 2003 **The 2nd Gifu World Design Award**, *Honorable Mention*, Japan

Research Grants

- March 2019 **Shin, Cliff, "Model-Solution® Prototype Research,"** Model-Solution® Research Award, Seoul, Korea, **\$30,000.**
- Dec. 2018 **LG Open Innovation**, LG Electronics USA,
UI/UX Study / Consumer Research
Englewood Cliffs, New Jersey, **\$30,000**
- Feb. 2018 **Shin, Cliff, "Model-Solution® Prototype Research,"** Model-Solution® Research Award, Seoul, Korea, **\$25,000.**
- May 2017 Hsiao-Wecksler, Elizabeth T., McDonagh , Deana C., **Shin, Cliff.**
Collaborations in Health, Aging, Research, and Technology (CHART) Pilot Program, University of Illinois at Urbana-Champaign, 2017, \$5,000.
- Jan. 2017 **Shin, Cliff, "Model-Solution® Prototype Research,"** Model-Solution® Research Award, Seoul, Korea, **\$35,000.**
- March. 2016 **Shin, Cliff, "Model-Solution® Prototype Research,"** Model-Solution® Research Award, Seoul, Korea, **\$20,000.**
- April. 2015 **Shin, Cliff, "Low-cost myoelectric prosthetic hand for users in low-income countries,"** College of Fine and Applied Arts Creative Research Award, University of Illinois at Urbana-Champaign, **\$6,600.**
- Aug. 2014 **LG Open Innovation, LG Electronics USA**, Englewood Cliffs, New Jersey, **\$35,000**

- Aug. 2013 **Consumer Science Initiative:** University of Illinois at Urbana Champaign / **\$2,500**
PI: Duff, Brittany / Lleras, Alejandro / White, Tiffany Barnett
Co-PI: Shin, Cliff / Soo-Yeon, Lee / Ellison, Brenna / Morris, Scott Nelson, Michelle
- May 2013 **Focal Point Grant**
Lead Faculty: Shin, Cliff / Bretl, Tim :University of Illinois at Urbana Champaign
\$15,000
Project Title : IDEAS (Interactions Design and Engineering of Adaptive system)
- April 2012 **IN3 (Interdisciplinary Innovation Initiative) Program**
PI: Ewoldt, Randy / CO-PI : Shin, Cliff
Collaboration between Mechanical Engineering and Industrial Design
University of Illinois at Urbana Champaign
\$174,929
"S.P.L.A.T. MECHANICS – Sticky Pastes And Liquids for Art and Technology,"
- Aug. 2012 Principal Investigator: Bullock, William, **Co-Principal Investigator: Shin, Cliff,**
"World Kitchen Proprietary Project: New Kitchen Products,"
Product Innovation Research Laboratory,
University of Illinois at Urbana-Champaign, **\$20,000.**
- Jan. 2012 Principal Investigator: Bullock, William, **Co-Principal Investigator: Shin, Cliff,**
Dell Inc. Proprietary Project, "New Uses for Recycling Laptop Computers,"
Product Innovation Research Laboratory,
University of Illinois at Urbana-Champaign, **\$20,000.**
- Aug. 2011 Principal Investigator: Bullock, William, **Co-Principal Investigator: Shin, Cliff, "MCS**
Proprietary Project: New Timepiece,"
Product Innovation Research Laboratory,
University of Illinois at Urbana-Champaign, **\$15,000.**
- March 2011 **Shin, Cliff, "Re-Thinking the Bathroom,"** College of Fine and Applied Arts Creative
Research Award, University of Illinois at Urbana-Champaign, **\$6,500.**
- Sept. 2008 **Siemens College Grant**
\$44,551,406 / Commercial Value
PLM Software: Unigraphics NX6 and SolidEdge 1 year free license

Design Patent

- Jan. 2013 "Cyclone Portable Fire Extinguisher," **Shin, Cliff** and Chen, Sam,
Design Patent number D674,154,

Research Publications

- March 2022 **Shin, Cliff** and Salamanca, Juan, Book Chapter, "Design and Complexity," in Design
Within the Anthropocene, ed. Milena Radzikowska (Accepted March 2022).
- Jan. 2022 **Shin, Cliff** and Yang, WonSeok, "Culture Study of Product Longevity among
Generation Z in Japan (in review)", Journal of the Science of Design Vol.5, Japanese
Society for the Science of Design.
- July, 2021 Ghim, Yong Gyun and **Shin., Cliff,** "Ageless Design: Interdependency Between
Complexity and Simplicity in Visual Perception of Product Aesthetics for Product
Longevity" in *Proceedings of the AHFE 2021 Virtual Conferences on Design for
Inclusion, Affective and Pleasurable Design, Interdisciplinary Practice in Industrial
Design, Kansei Engineering, and Human Factors for Apparel and Textile Engineering,*
July 25-29, 2021, ed. C. Shin.
- Nov., 2020 Yang, WonSeok and **Shin, Cliff,** " A Study on Presentation Method of Video
Thumbnail on SNS Using Micro-Moments", HCII 2020 International Conference on
Human-Computer Interaction

- July, 2020 Ghim, Yong Gyun and **Shin., Cliff**, "Ageless Design: A Design Method of Product Longevity for Cross-Generation" in *Proceedings of the 12th 2020 AHFE Vol. 969 International Conference on Interdisciplinary Practice in Industrial Design*, ed. C. Shin.
- July, 2019 Ruecker, Stan., Claudia Grisales, Claudia., Capozzo, John., Rosa, Juan Alfonso De La., Derksen, Gerry., Boff Ferronato, Priscilla., Cristina Sehn, Thais., and **Shin., Cliff**, "Should the Environment Be a Human Factor?" in *Proceedings of the 11th 2019 AHFE Vol. 968 International Conference on Interdisciplinary Practice in Industrial Design*, ed. C. Shin. 233-239
- Dec, 2016 Thomas, Joyce, **Shin, Cliff.**, "Implementing Design Sprints in the Education of Industrial Designers," *Design Principle and Practices: An International Journal - Annual Review*
- July, 2016 Akhtar, A., **Shin, Cliff.**, Bretl, T., et al, "A Low-Cost, Open-Source, Compliant Hand for Enabling Sensorimotor Control for People with Transradial Amputations" in *Proceedings of 38th 2016 Annual International Conference of the IEEE Engineering in Medicine and Biology Society*.
- July, 2015 **Shin, Cliff**, Thomas, Joyce, "Exploring the emotional experience of the user and designer, both in the design process and classroom," in *Proceedings of the 6th Applied Human Factors and Ergonomics Conference International Conference*, ed. T. Ahram, W. Karwowski and D. Schmorow (Louisville, KY.: AHFE Conference, 2015), 1665-1672
- Aug. 2014 Shin, Cliff, "Invisible Boundary, Emotional Boundary," in *Proceedings of the 5th Applied Human Factors and Ergonomics Conference International Conference*, vol. 19, *Advances in Affective and Pleasurable Design*, ed. Yong Gu Ji, Sooshin Choi. (Louisville, KY.: AHFE Conference, USA, 2014), 7752-7760.
- Aug. 2013 Bullock, W., **Shin, Cliff**, "Creating New Uses for Recycled Laptops," *IDSA Education Papers*, (International Conference of Industrial Design Society of America), (Chicago: 2013), <http://goo.gl/CMm1pi>.
- Dec. 2012 Shin, Cliff. "Reaching Out for the Customers' Insight: Metaphor and Storytelling in Design Process," *The International Journal of Design Management and Professional Practice*, Vol. 6, No. 4, (December 2012): pp 11-17.
- Aug., 2012 Shin, Cliff, "A Rational approach to the Emotional Design Process" (Poster), *IDSA Education Symposium, IDSA International Conference and Education Symposium*, Boston, Massachusetts, 2012.
- July, 2012 Shin, Cliff, "Emotion: New DNA in Design Process," in *Design Research Society 2012: Bangkok. Conference Proceedings*, vol.4, ed. Paima Israsena, Juthamas Tangsantikul, David Durling (Bangkok: Department of Industrial Design Chulalongkorn University, 2012), 1710-1724.
- June, 2012 Shin, Cliff, "Rational Approach to Emotional Design Process" (Poster), *5th International Conference on Design Computing and Cognition*, College Station, TX, 2012.
- Aug. 2011 Shin, Cliff, "Ingredient of Design Process: Going through Emotional Passage," in *Proceedings of the 18th International Conference on Engineering Design*, ed. S.J. Culley et al. (Copenhagen, Denmark: Technical University of Denmark, 2011), 97-106.
- May 2011 **Shin, Cliff**, Benson, E., McDonagh, D., "Emotional Ecomodernism: Is Using Bamboo Really Enough," in *Proceedings of E&PDE 2011, the 13th International Conference on Engineering and Product Design Education*, ed. Ahmed Kovacevic et al. (London, United Kingdom: The Design Society 2011), 354-359.
- May 2011 **Shin, Cliff**, Benson, E., McDonagh, D., "Fusing Empathy and Cognitive Science into the Design Process," in *Proceedings of the 10th International Conference on Naturalistic Decision Making (CD-ROM)*, ed. Stephen Fiore and Michelle Harper-Sciarini (Orlando, FL.: University of Central Florida, 2011), 181-187.

- Sept. 2009 Shin, Cliff, "Marrying Off Industrial Design," in IDSA Education Papers, <http://www.idsa.org/sites/default/files/C.%20Shin.pdf> (Miami: International Conference of Industrial Design Society of America, 2009).
- March 2008 Shin, Cliff. "Design Forecast for the Ubiquitous Era," *Asia Design Journal*, Vol. 3, No. 3, and (December 2007): pp 109-115.
- May 2007 *Design Processes and Case Study for Design For Six Sigma* (LG Internal Use Only)
- Sept. 2004 *Transitive Consumption – Future Concept Lab* ISBN 89-91056-12-1

Editorships of Journals or Publications

- July. 2021 **Lead Editor**, Volume of Advances in Industrial Design- Springer Book Series for 12th International Conference on Applied Human Factors and Ergonomics.
- July. 2020 **Editor**, Volume of Advances in Industrial Design- Springer Book Series for 11th International Conference on Applied Human Factors and Ergonomics.
- July. 2019 **Editor**, Volume of Interdisciplinary Practice in Industrial Design - Springer Book Series for 11th International Conference on Applied Human Factors and Ergonomics.
- July. 2018 **Co-Editor**, Volume of Interdisciplinary Practice in Industrial Design - Springer Book Series for 10th International Conference on Applied Human Factors and Ergonomics.
- July. 2017 **Co-Editor**, Volume of Affective Pleasurable Design - Springer Book Series for 9th International Conference on Applied Human Factors and Ergonomics.
- July. 2016 **Co-Editor**, Volume of Affective Pleasurable Design - Springer Book Series for 8th International Conference on Applied Human Factors and Ergonomics.
- Feb. 2016 **Scientific Review Committee**, Engineering and Product Design Education Conference (E&PDE16), Design & Media Technology of Aalborg University, Denmark.
- July. 2015 **Co-Editor**, Volume of Affective Pleasurable Design - Springer Book Series for 7th International Conference on Applied Human Factors and Ergonomics.
- Feb. 2015 **Scientific Review Committee**, Engineering and Product Design Education Conference (E&PDE15), Loughborough, United Kingdom
- Jan. 2012 **Associate Editor**, International Journal of Design Education, Common Ground Publishing, Champaign, Illinois.

Lecture / Presentation

- Nov. 2018 Speaker, "Last Long Design" International Integrated Design Camp by Korea Design Institute and Promotion(KIDP), Korea.
- Feb. 2018 "What Color is Your Design?" College of Design, Georgia Institute of Technology, Atlanta.
- Nov. 2017 Keynote Speaker, "Design is Journey" Korea Design Festival by Korea Design Institute and Promotion(KIDP), Seoul, Korea.
- March 2017 "Design is a Storytelling" School of Architecture + Design, Virginia Technology Institute, Blacksburg, nia. (March 21st)
- March 2017 "Color and Story," Department of Design, The Ohio State University, Columbus, Ohio. (March 6th)
- April 2016 "Design is a cup of seawater" College of Liberal Arts, North Carolina State University, Raleigh, (April 15th)
- March 2016 "Industrial Design & Emotions," Herberger Institute for Design and the Arts, Arizona State University, Tempe, (March 20th)
- Feb. 2016 "Design, Storytelling," School of Art + Art History + Design, University of Washington, Seattle, Washington. (February 15th).

- July 2015 Shin, Cliff, "Exploring the emotional experience of the user and designer, both in the design process and classroom," in proceedings of 6th International Conference on Applied Human Factors and Ergonomics, Las Vegas, Nevada. (July 27, 2015).
- Jan. 2015 Shin, Cliff, "Social Sustainability, Security Blanket Theory," 11th International Conference on Environmental, Cultural, Economic, and Social Sustainability, Copenhagen, Denmark. (January 23, 2015).
- July 2014 Shin, Cliff, "Invisible Boundary, Emotional Boundary," International Conference of on Affective and Pleasurable Design, Jagiellonian University, Krakow, Poland. (July 19, 2014)
- Jan. 2014 Shin, Cliff, "Industrial Design with New Technology Nugget: Collaboration between industrial design and Rheology," 8th International Conference on Design Principles and Practices, University of British Columbia, Vancouver, Canada. (January 7, 2014).
- April 2013 "Security Blanket Theory", TEDx UIUC, I Hotel, Champaign, Illinois.
<http://tedxtalks.ted.com/video/Security-Blanket-Cliff-Shin-at>
- March 2013 Invited Lecture, "Emotions in Design", Ulsan National Institute of Science and Technology, Ulsan, Korea, March 2013.
- March 2013 "Essenes of Design, Emotions: Defining Security Blanket Theory," 7th International Conference on Design Principles and Practices, Chiba University, Chiba, Japan
- Nov. 2012 Invited Lecture, "Creativity and Emotion", Department of Mechanical Science and Engineering, University of Illinois at Urbana Champaign
- Oct. 2012 Invited Lecture, "Material Can Change Users' Feeling", Department of Mechanical Science and Engineering, University of Illinois at Urbana Champaign
- Aug. 2012 "Rational approach to emotional design process," 2012 IDSA International Conference and Education Symposium, Boston, MA.
- July 2012 "Emotion: New DNA in Design Process," International Conference of 2012 Design Research Society, Bangkok, Thailand.
- June 2012 "Rational Approach to Emotional Design Process," 5th International Conference on Design Computing and Cognition, College Station, TX.
- June 2012 "True vs. Truth in Emotional Design," LG Corporate Headquarter Design Center, Seoul, Korea
- June 2012 "Emotional Design," Seoul National University, Seoul, Korea, (Keynote Speaker & Workshop Facilitator at international Urban Media Workshop).
- June 2012 "Avatars in Emotional Design Process," Seoul National University, Seoul, Korea.
- June 2012 "Industrial Design in Emotion," Korea Advanced Institute Technology, Lunch Talk, Daejeon, Korea.
- June 2012 "Emotional Design Process," Seoul Women's University, Seoul, Korea.
- Jan. 2012 "Reaching Out for the Customers' Insight: Metaphor and Storytelling in Design Process" Design Principle & Practice 2012, Los Angeles, USA.
- Sept. 2011 Invited Lecture "Emotion, Design Process", College of Media, University of Illinois at Urbana Champaign
- Aug. 2011 18th International Conference on Engineering Design, "Ingredient of Design Process: Going Through Emotional Passage"
- June 2011 10th International conference on Natural Decision Making, "Fusing Empathy and Cognitive Sciences into the Design Process"
- April. 2011 "Emotional Stimulus Package" Midwest IDSA District Conference, St. Louis

- Nov. 2010 “101 Industrial Design: The Importance of Design for Young Companies.” Enterprise Works, Research Park, Champaign
- Sept. 2010 “Emotion & Design,” Arizona State University, Tempe, AZ, September 21, 2010.
- Jan. 2010 “Invitation of Industrial Design”, International Arts and Humanity Conference
- Sept. 2009 “Marrying Off Industrial Design”, International IDSA Conference
- March 2009 Invited Lecture, “Product Design Process & Trend”, College of Ecology, Kansas State University
- Feb. 2009 Invited Lecture, ‘Principle of Package Design”, College of Business Administration, Kansas State University

Conference Organize

- July. 2021 **Conference Track Co-Chair**
Shin, Cliff, & Ghim, Yong Gyun 5th International Conference of on Interdisciplinary Practice in Industrial Design, .
- July. 2020 **Conference Track Co-Chair**
Shin, Cliff, & Ghim, Yong Gyun 4th International Conference of on Interdisciplinary Practice in Industrial Design,
- July. 2019 **Conference Track Chair**
Shin, Cliff, 3rd International Conference of on Interdisciplinary Practice in Industrial Design, Washington D.C, July 13- 17, 2019.
- July. 2018 **Conference Track Chair**
Shin, Cliff, 2nd International Conference of on Interdisciplinary Practice in Industrial Design, Orlando, Florida, July 17-21, 2018.
- July. 2017 **Conference Co-Chair**
Shin, Cliff, Chung, Wonjoon, 1st International Conference of on Interdisciplinary Practice in Industrial Design, Orlando, Florida, July 27-31, 2017.
- Dec. 2016 **Conference Co-Chair**
Shin, Cliff, Chung, Wonjoon, 5th International Conference of on Affective and Pleasurable Design, Los Angeles, California, July 17-21, 2016.
- Dec. 2015 **Conference Co-Chair**
Shin, Cliff, Chung, Wonjoon, 4th International Conference of on Affective and Pleasurable Design, Orlando, Florida, July 27-31, 2015

Professional Memberships

- 2004 - Present Industrial Designer Society of America (IDSA)
- 2021 - Present Japanese Society of the Science and Design
- 2012 - 2014 Design Research Society (DRS)
- 2003 - 2004 Industrial Designer Society of America (IDSA), Midwest Chapter Student Member
- 2002 - 2003 American Society of Interior Design (ASID)
- 1999 - 2000 National Honor Society (Tau Alpha Pi)
- 1999 - 2001 Treasurer, Society of Manufacturing Engineers, Arizona State University
- 1997 - 2001 Society of Manufacturing Engineer (SME)

CARLOS HENRIQUE ARAÚJO DE AGUIAR

2203 Rebecca Dr. Champaign, IL 61821 United States. +1(206) 890-9681. chaa@illinois.edu

POSITIONS AND RESEARCH EXPERIENCE

Assistant Professor of Industrial Design at the School of Art & Design, and Affiliate Faculty of Informatics at School of Information Sciences, University of Illinois Urbana-Champaign. Director of the Design, Technology, and Society Lab, UIUC (2021-present).

Projects: I am the leader of several research projects at the intersection of design, STS, HCI, UX, and Human Behavior. I explore the development of cyber-physical artifacts and environments, and investigate how these artificial systems can enable, foster, and assist humans' interactions, needs, and activities. Some of my research targeted applications such as smart and connected communities; aging in place; literacy; and individual and collaborative work. More info at: <https://designtechnologyandsocietylab.com>

Ph.D. research, Cornell University (2015-2020)

Project: communit– a large-scale, cyber-physical artefact, designed to create community engagement and promote civic discourse in underused public spaces.

Roles: user studies, co-design activities, design, to-scale and full-scale prototyping, conference paper & proposal writing.

Committee: Keith Green (advisor), Trevor Pinch (STS minor), Gilly Leshed (IS minor), Jon McKenzie.

Grant: Lee Gift Research Grant, Cornell **\$10,000** to support pilot research.

Research Assistant, Architectural Robotic Lab, Cornell University (2015-2020)

Project: home+, a distributed, assistive technology facilitating aging in place.

Roles: user studies, design, full-scale prototyping, circuit design and assembly.

Principal Investigator: Keith Green.

Grant: home+ project Funded by U.S. **NSF Grant**

M.Sc. research, University of Washington (2015-2017)

Project: Configurable Space– Architectural Robotics at the Scale of Furniture.

Roles: user studies, design, to-scale and full-scale prototyping, circuit design and assembly, conference paper writing.

Committee: Brian Johnson (advisor), Kimo Griggs (co-advisor) and Keith Green (external committee member).

EDUCATION

Doctor of Philosophy | Design & Human Behavior.

Cornell University, College of Human Ecology – Design + Environmental Analysis. Ithaca, NY. (August, 2021).

Minor: Science and Technology Studies, and Information Science

Doctor of Philosophy | Planning, Design and Built Environment

Clemson University, College of Architecture, Arts and Humanities. Clemson, SC. (Transferred to Cornell University, 2016)

Master Science | Design Computing

University of Washington, College of Built Environment. Seattle, WA. (2017)

Bachelor | Architecture and Urbanism

Universidade Estácio de Sá, School of Architecture and Urban Planning. Rio de Janeiro, Brazil. (2012)

PUBLICATIONS

Peer Reviewed Papers in Conference Proceedings

[7] **Carlos de Aguiar**, Gilly Leshed, Trevor Pinch, Keith Green. (2022) 'Evaluation of communitIT, a Large-scale, Cyber-physical Artifact Supporting Diverse Subgroups Building Community'. 1 Jan. 2022 : 1 – 14.

[6] **Carlos de Aguiar**, Keith Green, Trevor Pinch, Gilly Leshed, Kevin Guo, and Yeolim Jo. (2021). Designing and Building communitIT. In Media Architecture Biennale 20 (MAB20). Association for Computing Machinery, New York, NY, USA, 1–11. <https://doi.org/10.1145/3469410.3469411>

[5] Xu, Tong; Dewey, Clara; Vira, Amil; **de Aguiar, C. H.**; Yoon, JungKyoan. (2019). Erglove: an ergonomic solution for wrist injury prevention. IASDR 2019 Conference, at Manchester, UK.

[4] **de Aguiar, C. H.**, Leshed, G., Bernard, A., McKenzie, J., Andrews, C., Green, K. (2018). CoDAS, a Method for Envisioning Larger-Scaled Computational Artifacts Connecting Communities. IEEE Universal Village, Boston USA.

[3] Bernard, A., **de Aguiar, C. H.**, Green, K. (2018). Model for a Rigid, 3D Mechanism Inspired by Pop-Up Origami, and its Application to a Re-configurable, Physical Environment. IEEE CASE, at Munich, Germany.

[2] Verma, S., Gonthina, P., Hawks, Z., Nahar, D., Brooks, J., Walker, I., Wang, Y., **de Aguiar, C. H.**, Green, K. (2018). Design and Evaluation of Two Robotic Furnishings Partnering with Each Other and Their Users to Enable Independent Living. Pervasive Health, at New York, USA.

[1] **de Aguiar, C. H.**, Fateminasab, R., Frazelle, C., Schott, R., Wang, Y. Wooten, M., Green, K., Walker, I. (2016). The Networked, Robotic home+ Furniture Suite: A Distributed, Assistive Technology Facilitating Aging in Place. IEEE CASE 2016, At Fort Worth, Texas, USA, Volume: pp. 1067-1072

Peer Reviewed Papers for Workshop and Late-Breaking Session

[6] Y. Cui, Z. Guo, Y. Wang, X. Peng, J. Park and **C. Aguiar**. (2022) "Doki: A Multi-sensation Interaction Device that Communicates Emotions," 2022 18th International Conference on Intelligent Environments (IE), 2022, pp. 1-4, doi: 10.1109/IE54923.2022.9826782.

[5] **de Aguiar, C. H.** (2018). transFORM—A Cyber-Physical Artefact Augmenting Social Interaction in Residual Public Spaces. TEI 2019 Proceedings, Graduate Student Consortium, at Temper, USA.

[4] Choueiri, M., Duffy, S., Guria, S., McCarthy, C., Moure, P., Todalbagi, A., Wang, Y., **de Aguiar, C. H.**, Green, K. (2018). Can Interactive Systems Be Designed for Conviviality? A Case Study. DIS 2018 PWiP, at Hong Kong, China.

[3] **de Aguiar, C. H.**, Green, K. (2018). transFORM - A Cyber-Physical Environment Increasing Social Interaction and Place Attachment in Underused, Public Spaces. DIS 2018 PWiP, at Hong Kong, China.

[2] **de Aguiar, C. H.**, Bernard A., Green, K. (2018). EnAct – A Cyber-Physical Environment Increasing Social Interaction and Place Attachment in Underused Outdoor Spaces. CHI 2018, HCI Outdoors Workshop, at Montreal, Canada.

[1] **de Aguiar, C. H.** (2016). EnAct. A Responsive, Cyber-physical Architecture as Social Activator of Informal Gathering Spaces in the City. *archi-Doct Journal, Transformable Architecture*, 7th edition.

FELLOWSHIP AND AWARDS

\$25,425,00. Home Economics Extension, Butts, Orrilla Wright Memorial, Jean Failing, Dimelow, Grace C and Virginia F. Cutler Fellowships (Graduate), College of Human Ecology, Cornell University. Award in recognition of academic records. Fall 2019.

\$5.568,00. Dimelow, Grace C Scholarship (Graduate), College of Human Ecology, Cornell University. Award in recognition of academic records. Summer 2018.

\$16.350,00. International Student Tuition Waiver, University of Washington. Spring 2017.

TEACHING EXPERIENCE

Instructor – Human Centered Product Design

University of Illinois Urbana-Champaign, Fall 2021/2022

Responsibilities: ran sections and mentored students throughout a semester long course, held office hours, assisted with weekly assignments, graded assignments and papers.

Course description: This course explores the use of human centered design methods to generate ideas and evaluate designed objects, environments, and interfaces. Lectures cultivate an understanding of the various methods, while hands-on activities provide opportunities to apply these methods to the design of artifacts and their interactions with people and things.

Course Objectives and Goals:

- To develop an understanding of how and which design methods can be applied in the iterative process of designing an artifact.
- To demonstrate the ability to develop and evaluate design prototypes responsive to the challenges and opportunities of society.
- To communicate a design process in a paper and video that satisfy the requirements of a benchmark, design-research conference/competition.

Instructor – Sustainability and Manufacturing

University of Illinois Urbana-Champaign, Spring 2022

Responsibilities: ran sections and mentored students throughout a semester long course, held office hours, assisted with weekly assignments, graded assignments and papers.

Course description: This course teaches foundation in design for production, manufacturing processes, understanding material properties, and sustainable practices. Students engage in a long semester project to redesign an old technology.

Course Objectives and Goals:

- Understand and have the ability to discuss material characteristics and production techniques
- Have the ability to identify the method of production and materials used in a design
- Ability to look at a product's manufacturing and see opportunities for change/improvement
- Awareness of the relationship between designer and manufacturer
- Understand both limitations and potential in using specific materials and processes

Instructor – Industrial Design II

University of Illinois Urbana-Champaign, Spring 2022

Responsibilities: ran sections and mentored students throughout a semester long course, held office hours, assisted with weekly assignments, graded assignments and papers.

Course description: This course builds Industrial Design I to apply a human-centered design process to identify new product opportunities. It involves knowledge acquisition and the development of skills to conceptualize, resolve, and present well-reasoned product ideas through drawing and modeling. The course introduces techniques of analysis and critique of design outcomes and fundamental principles

applicable to industrial Design. This course engages students with learning to design through iterative processes integrating considerations of user context, product aesthetics, human factors, material, and manufacturing process.

Instructor – Industrial Design I

University of Illinois Urbana-Champaign, Fall 2021/2022

Responsibilities: ran sections and mentored students throughout a semester long course, held office hours, assisted with weekly assignments, graded assignments and papers.

Course description: The course consisted in introducing the students to the creative process and methods involved in industrial design. Aspects such as general design research, modeling, form-giving, prototyping, and communication with an emphasis on user-centered design, were all at interest. Projects of escalating scale and complexity complemented by lectures and demonstrations.

Teaching Assistant – Applied Ergonomics

Cornell University, Spring 2019

Responsibilities: ran sections when necessary, held office hours, assisted with weekly assignments, graded assignments and papers, and maintained the class electronic mailing list.

Teaching Assistant – Interaction Design (IxD) Studio

Cornell University, Spring 2018

Responsibilities: held design critiques, ran sections when necessary, held office hours, assisted with grading assignments.

Teaching Assistant – Health Care Innovations

Cornell University, Spring 2018

Responsibilities: graded midterms and finals, and maintained the class web and blackboard sites.

Teaching Assistant - Making a Difference by Design

Cornell University, Fall 2016

Responsibilities: ran weekly sections, held design critique, held office hours, and graded assignments.

Teaching Assistant - Human Centered Design Methods

Cornell University, Fall 2016

Responsibilities: held design critique, held office hours, ran sections when necessary, graded and assisted with weekly assignments and quizzes.

Instructor - Design Communication (Studio)

Clemson University - Spring 2016

Responsibilities: designed and ran sections, held desk critique and design review, held office hours, and graded design projects.

Instructor - Architectural Portfolio (Lecture)

Clemson University - Fall 2015

Responsibilities: designed and ran weekly sections, held design critique, held office hours, and graded assignments.

SOCIAL MEDIA

Personal Website with main research projects: <https://designtechnologyandsocietylab.com>

ACM DL profile: https://dl.acm.org/author_page.cfm?id=99659277311

Research Gate profile: https://www.researchgate.net/profile/Carlos_De_Aguiar

LinkedIn profile: <https://www.linkedin.com/in/carloshenriqueaa/>

Interview to the School of Human Ecology, Cornell University:
<https://www.youtube.com/watch?v=A6i3uXiyB6w>

James W. Kendall
Mount Prospect, IL
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269-277-0785
www.linkedin.com/in/jim-kendall

INDUSTRIAL DESIGNER – INNOVATOR – MANAGER – EDUCATOR

Industrial design educator who teaches and creates curriculum. Accomplished designer creating global product platforms in consumer, commercial and medical markets through-visual design/experience languages for high volume manufacturing needs while balancing functional constraints and cost. Background includes close collaboration with teams of cross-functional disciplines to create intellectual property, ergonomically sensitive user controls and display, and precise, complex assemblies - all in aesthetically pleasing solutions. Other techniques uncovered unmet user needs through variety of design thinking tools, scenario planning, prototyping, and user ethnographic and consumer research.

PROFESSIONAL EXPERIENCE

UNIVERSITY OF ILLINOIS Urbana - Champaign, IL
Assistant Professor of Industrial Design 2018 - present

Full time teaching position creating and guiding industrial design studio classes

- Author – *Foundation of Industrial Design Working with Principles* ISBN 978-1-7924-9459-8
- Developed new syllabus and content for *Introduction to Industrial Design*
- Created course lessons and instruction for *Design Drawing*
- Created syllabus and delivered instruction and content for *Graduate and Junior Studio*

KENDALL DESIGN Mount Prospect, IL
Owner/Principal Designer 2018 - present

Consultant industrial design services

- Provide future product visualization and configuration expertise
- Develop future product line road maps and visualize innovations
- Develop and execute product branding creation and design

WHIRLPOOL CORPORATION Benton Harbor, MI / Chicago, IL
Principal Designer – Global Consumer Design 2005 – 2018

Led the development of product line systems by collaborating with in-house professionals, external partners, and consulting design teams.

- Created strategy conceptualization and development of dishwasher door product lines through collaboration with cross-functional, global teams – launched in 2018 with years to expand.
- Held role of lead dishwasher designer for industry- leading appliance retailer with 2 product launches in 2017 resulting strong sales and strong consumer preference in a competitive market
- Conceptualized and initialized multi-branded products for split-air conditioning systems from China for Brazilian, India, and European markets resulting in fewer parts and cost for an expansive global marketplace.
- Conceptualized and initialized *Drop* branded water filtration products for US market resulting patented solution that was new to the corporation expanding the brand name and new shelf positions at retail.
- Conceptualized and initialized multi-branded products for global refrigeration exploring door and manufacturing flexibility resulting better utilization of existing manufacturing equipment and expansion of the products being offered to the market for multiple brands.
- Initialized and developed multi-branded, mid-priced washer and dryer pair allowing the corporation to enter in to lower price point markets and expanding retail floor reach.

WHIRLPOOL CORPORATION

Advanced Studio / Emerging Brands Studio Manager – Global Consumer Design 2002 – 2005

Oversaw 4-6 studio personnel and staffing team of designers to create innovations and expand existing brand offerings with a \$1M annual budget. The studio managed design for national brands – Roper, Estate, Gladiator Garageworks, Pla.

- Led design branding efforts for all aspects of visual language resulting a documented control system that defines the design while working with external consultants and team designers.
- Coordinated in-house and consulting design team activities to create the visual brand language specification including of all color, finishes, materials, and product forms to express the brand in the market and meet ergonomic requirements.
- Created a full line of products for the PLA brand targeted at new home appliance buyers to expand the market reach of the corporation in both the North America and Brazil.

Insight Product Development, LLC
Senior Manager

Chicago, IL
1997-2002

Led the development teams of 3-15 people for multi-thousand to \$1M product design programs – user research, design, engineering, prototyping and initial release

- Design and development of a wide variety of products resulting in successfully launched products for blood collection instrumentation, operating room boom systems, and bio pharmaceutical storage and transport.
- Responsible for project management and all phases of design – sales proposals through manufactured part fabrication resulting in a continuous stream of revenue for the consultancy.
- Simultaneous program tracking and management including project activities, resources and timelines and project profitability.
- Participated in staff reviews and department annual company budgeting.

Volan Design, LLC
Project Director

Boulder, CO

Robert Case and Associates, Inc.
Senior Product Designer

Chicago, IL

Space Management Programs, Inc.
Industrial Designer

Chicago, IL

University of Illinois
Design Instructor

Urbana - Champaign, IL

EDUCATION

Master of Fine Arts (MFA)
Industrial Design
University of Illinois

Champaign-Urbana, IL

Bachelor of Science (BS)
Industrial Management
Minor in Industrial Engineering
Purdue University

West Lafayette, IN

PATENTS

10,053,807 Laundry system
10,041,201 Modular laundry system
D824,606 Laundry washing module
9,939,193 Apparatus, system, and method for storage in a refrigerated appliance
9,874,394 Method of making a folded vacuum insulated structure
9,611,578 Modular laundry system
9,795,010 Sensor system for refrigerator
9,759,438 Air conditioner with selective filtering for air purification
9,731,234 Liquid pitcher including divided fluid for inlet and outlet filtering
9,714,779 Air conditioner with selective filtering for air purification
9,702,619 Controlled, dynamic lighting of interior of appliance
9,599,353 Split air conditioning system with single outdoor unit
9,539,526 Filter assembly and system/methods of dispensing from and storing the filter assembly
9,347,701 Refrigerator module mounting system
9,310,123 Method of making an appliance door
9,252,570 Countertop module utilities enabled connection
9,071,907 Vacuum insulated structure tubular cabinet construction
9,003,825 Refrigerator with module receiving conduits
8,944,541 Vacuum panel cabinet structure for a refrigerator
8,739,568 Appliance feature module enabled by energy or materials sourced from the host appliance
8,522,563 Method of forming conduit receiving passageways in a refrigerator
8,459,067 Modular laundry system with vertical laundry module
8,456,040 Refrigerator module utilities enabled via connection
8,453,476 Refrigerator module mounting system
8,413,470 Modular laundry system with vertical laundry module
8,381,552 Modular laundry system with vertical laundry module
8,375,750 Modular laundry system with vertical laundry module 8,336,975 Plenum on front of refrigerator/freezer door
8,322,169 Modular laundry system with vertical laundry module 8,299,656 Feature module connection system
8,286,452 Modular laundry system with segmented work surface
8,187,124 Batting swing trainer and method
8,154,857 Appliance host with multiple service interfaces for coupling multiple consumer electronic devices
8,128,184 Double-sided door module
8,117,865 Refrigerator with module receiving conduits
8,072,738 Writing surface with removable portable electronic device
8,035,958 Functional unit of a consumer electronic device and writing surface
7,934,958 System for mounting a device to a host
7,931,114 Adapter or appliance with a user interface window
7,871,300 Host with multiple sequential adapters for multiple consumer electronic devices
7,870,753 Appliance door with a service interface
7,810,343 Dispenser with a service interface for a consumer electronic device
7,748,494 Acoustic chamber as part of adapter
7,713,090 System for slidably coupling consumer electronic devices to an appliance
7,686,127 Acoustic chamber as part of adapter or appliance
7,651,368 Appliance with an adapter to simultaneously couple multiple consumer electronic devices
7,625,246 System for supplying service from an appliance to multiple consumer electronic devices
7,296,695 Workroom storage system
7,228,977 Workroom storage system
D520,148 Slot track
6,949,036 Batting swing trainer and method
6,786,054 Systems and methods for freezing, storing and thawing biopharmaceutical material
6,684,646 Systems and methods for freezing, storing and thawing biopharmaceutical material
D480,122 Batting swing trainer
D457,929 Batting swing trainer with movable slide
6,325,775 Self-contained, transportable blood processing device
5,758,655 Needle device with improved handle
D387,065 Teleconferencing device
D385,281 Conference pro remote microphone
D379,229 Bone marrow biopsy needle
D356,302 Cartridge library system

**ARTICLES
& LECTURES**

"Vision Needed"
Innovation, IDSA Quarterly Journal, Winter 2017

Metropolitan State University at Denver – "Utility Patent Overview" continuing lecture to business students

ALYX component collection system, manufactured by Baxter Healthcare Corp.
Medical Device & Diagnostic Industry Magazine
2005 Medical Design Excellence Awards

"Product Development Baseball"
Innovation, IDSA Quarterly Journal, Winter 2001

"Seeing Opportunities in Product Development" - Northwestern Engineering/Kellogg School Graduate School of Management Guest Lecture, Spring 2001

"Tailoring Innovation" - Hong Kong Productivity Council & Design Innovation Executive Forum Lecture at Illinois Institute of Technology, March 2001

"Product Development Strategies in a Networked Economy" - Northwestern Kellogg Graduate School of Management Guest Lecturer/Course Collaborator, Winter 2000

"Industrial Designers as Product Developers"
Innovation, IDSA Quarterly Journal, Winter 2000

"How Business Executives and Designers Work Together" - Consumer Electronics Show Lecture Las Vegas, NV, January 2000

"ID & Quality/A Vital Link to Customer Satisfaction"
Innovation, IDSA Quarterly Journal, Fall 1998

"Risk Management: Industrial Design Methodology for Medical Product Development,"
Medical Device and Diagnostic Industry, February 1995

"Vision Considerations for the Anesthesia Machine Operator,"
Official Publication of the American Association of Nurse Anesthetists, June 1986

MEMBERSHIPS **Industrial Designers Society of America**
Founder and Former Chair of the IDSA Product Development Section
Former National Conference Agenda Speaker Coordinator

SALMAN RAHEEL

2611 Willoughby Road
Champaign, IL 61822

sraheel@illinois.edu
217.714.0499

Salman Raheel is a designer whose creative path led him through industrial design and global manufacturing before dedicating himself to making objects by hand. The heart of his interests has to do with the principle of Beauty, and with creativity in the way we live in this world.

Having earned his MFA in Industrial Design (1996), under his Graduate Advisor David Coleridge Ryan at the University of Illinois at Urbana-Champaign, he relocated to Italy in 1997. Settling in Tuscany, he met Ing. Carlo Doveri, a colleague of Corradino D'Ascanio – inventor of the Vespa scooter. He joined Carlo Doveri's engineering team at EDI Progetti, developing scooter and motorcycle prototypes for clients worldwide including Piaggio, Aprilia, Greaves Vehicles Ltd. (now PGVL), BMW, Peugeot and Kymco.

In 2004, he joined Plastwood Srl, Sardinia, where he restructured and lead creative direction as Head of Design and Development, remaining with the toy company for three years developing new product lines and helping bridge the company's move to global manufacturing for international markets. Since 2011, he works across multiple disciplines on Haiku Sarti, a collaborative centered around clothing, music, design and the visual arts.

Currently he teaches, since 2018, as a member of the Faculty of the Industrial Design program at the University of Illinois at Urbana-Champaign.

EXPERIENCE

PROFESSIONAL & ACADEMIC

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

2018-Present

Assistant Teaching Professor, Industrial Design

HAIKU SARTI

2011-2020

Amelia (Terni), Italy / Champaign, IL. USA | haikusarti.com

Capsule collections of handmade clothing. Design and in-house production.

The *Wander* capsule is a collection of unique pieces made by hand, for men and women, with vintage Italian textiles from the 1920's and 1940's, inspired by the wanderers, travelers.

Garmentsculpture capsule collection. Study and acquisition of artisan methods and traditional sartorial techniques, research on natural fibers. These collections were presented as a traveling exhibit.

CADMANAGER SRL

2008-2009

Tavarnelle (Siena), Italy | cadmanager.it

2003-2004

Reverse engineering of complex surfaces.

Consumer product development, feasibility studies, design engineering.

PTC Pro/engineer Wildfire (now CREO) CAD system. Instructor and client technical support.

PLASTWOOD SRL

2004-2007

Calangianus (Sardinia), Italy | supermagtoys.com

Department Head, research & development.

Responsible for creative direction, concept design and development.

Designed and developed childrens toy product lines.

Trained and managed a five person design team.

Facilitated the company's move to global manufacturing for international markets.

Liaised with suppliers and external support including Italian patent law legal offices.

Rigorously adhered to international safety standards governing products for children.

EDIPROGETTI SNC

1997-2003

Pontedera (Pisa), Italy | ediprogettiviluppo.com

Industrial designer. Team member in a 20+ person engineering firm headed by Ing. Carlo Doveri.

Reverse engineered external surfaces from mechanical and laser scan point cloud data of motorcycle and scooter design models. Developed the resulting surfaces into separate parts for manufacture.

Clients included: Piaggio, BMW, Peugeot, Aprilia, Greaves Ltd (PGVL) and Kymco.

ATRON REGEN INTERIOR

1993-1994

Champaign, IL.

Interior design Assistant. Architectural layouts, home and office interiors.

Teaching Assistant

Industrial Design Studio Year 2 & 4. University of Illinois at Urbana-Champaign. 1994 & 1995.

Design Drawing Studio Year 1 & 2. University of Illinois at Urbana-Champaign. 1993 & 1994.

Graphic design Assistant

Beckman Institute for Advanced Science and Technology. UIUC. 1990-1991.

Graphic and Information design. Branding, posters, print media.

EXPERIENCE

DIGITAL MEDIA

Familiarity with **HTML, CSS, LAMP** stack (Apache/Mysql/Php). Built websites on **Kirby CMS**.

Experienced on RedHat based **GNU/Linux** systems.

2D Bitmap and **2D/3D vector** graphics.

Pro/engineer (CREO) & Solidworks - Parametric solid modeling & surface construction.

Blender - Mesh modeling, rendering, sequencing, some animation.

3D digital scanning, printing and rapid prototyping (**SLA, FDM, SLS**).

EDUCATION

University of Illinois at Urbana-Champaign (UIUC)

MFA Industrial Design 1996

MSc 1986 & BSc Food Science 1985

LANGUAGES

English. Italian. Urdu.

EXHIBITIONS

Walking the World

Traveling exhibit. 2014-2017. Co-ideation, co-production.

Result of the **Wander** capsule collection of clothing, reflecting on space/body/movement.

Galleria Borghese, Mentana (Rome) Italy, 12/2017.

Paris Oracle Boutique, Rome, Italy. 05/2017.

Atelier Il Piumaccio, Amelia (Terni) Italy, 10/2015.

MFA Show

Krannert Art Museum, University of Illinois at Urbana-Champaign.

Master of Fine Arts Graduate Student show. 1995.

Wearable metal sculpture.

email: simrun@Illinois.edu

Academic Qualification

Masters in Business Design (2006-2007)
Domus Academy, Milan, Italy

Diploma in Business Management (1999-2000)
NM College of Management, Mumbai, India

Diploma in Interior Design (1985-1988)
P V Polytechnic, SNDT University, Mumbai, India

Continuing Education Certificate

Teaching with Case Methods (November 2019) Harvard Business School, Boston.

Workshop on Designing an Online Course (April 2019) UIUC, Urbana Champaign

Workshop in Introduction to Design Thinking Methods (April 2016). National Institute of Design, Ahmedabad.

Conducted Workshop in Risk Management in New Product Development (December 2015). Spring Singapore.

Professional Experience - Academic

January 2017 – Present	Teaching Assistant Professor- Industrial Design + GIES College of Business, University of Illinois at Urbana Champaign, Illinois, USA
August 2013 – November 2016	Associate Professor – Head Industrial Design + Spatial and Interior Architecture, School of Design, Ansal University, Gurgaon, India.
August 2012 – July 2013	Visiting Faculty – IILM, School of Design, Gurgaon, India. IILM, School of Management, New Delhi, India.
November 2011	Visiting Faculty – National Institute of Design, Ahmedabad
August 2010 – May 2011	Visiting Faculty – School of Design, Singapore Polytechnic, Singapore.

Professional Experience - Practice

Aug 2014 - November 2016	Future Factory – Lead: Strategy and New Product Development, India & Singapore. Selected Clients in India: Caryaire Equipments India Pvt. Ltd., Luminous, Stryker, Groz Engineering, Havells, Maharaja Whiteline. Selected clients in Singapore: Nextokin Creatives, Eastern Healthcare, Siemens.
May 2012 - December 2012	Rajiv Sethi Scenographer , New Delhi. <ul style="list-style-type: none">Project management for Chhatrapati Shivaji International Airport Terminal 3, Mumbai.

SIMRUN S SETHI

Professional Experience - Practice

- July 2011 - December 2012 **Design Consultant**, New Delhi
- Creative & Execution for Residential Interiors in Gurgaon.
- January 2008 - June 2011 **S.Sethi Strategic Business Design Consultant**, Singapore
- GODREJ & BOYCE, Mumbai – New Products Development, Trend Mapping, Market Research.
 - MEIBAN GROUP Pte. Ltd. Singapore – Strategic Design, and New Product Development.
- January 1999 - April 2005 **Jolly Design**, Mumbai
- Founder of design firm manufacturing limited edition products in leather, wood and metal.
- June 1989 - May 2005 **Circus Design Studio**, Mumbai.
- Head of Interior Division - Creative Direction

Publications / Conferences / Exhibitions

Sethi Simrun, Sethi Suresh (2020) ' Narrative as a Vehicle for Learning' - Fourteenth International Conference of Design Principles and Practices, New York March 16-18, 2020

Sethi Simrun (2018) 'On Design Thinking'. The IVenture Accelerator, UIUC, Champaign, July 2018

Sethi Simrun, Sethi Suresh (2015) Sustainable Future: Every Design Tells a Story, Gwangju Design Biennale , South Korea. October 15 – December 15, 2015. Invited.

Ceppi, G. (2007). Business Design as Method in *Made in Italy Files*, (pp 43-47). Rome: Fondazione Valore.

Upadhyay, K. (2001) 'Priceless maritime exhibits at Sea India'. Times of India, Mumbai.

Balaram, G. (2001) 'Anushakti Bhavan showcase maritime heritage'. Times of India, Mumbai.

'Maritime Gallery to Open in City'. (1999). Express Newslines February 3, (pp. 1). Mumbai.

'Mumbai Maritime Gallery'. (1999). Asian Age, Mumbai.

Giannetti, P. V. (1996) 'Designer Ahoy'. Bombay Times, October 8, (pp. 8). Mumbai.

Chugani, B. (1995) '*Wow, what a Dhow*', in Economic Times. Bombay: June 19.

Kagal, N. (1993) '*Young Designers: Bombay*', Mumbai: Architecture and Builders, September (pp. 134-135). Mumbai.

Selective Creative Works**Exhibition Design**

- Maharashtra Tourism Board. (2003). *'Ethnicity'*, Exhibition design and Installation at the Kala Ghoda Festival, Mumbai.
- Handicraft & Handloom Export Council of India. (2002). A range of objects developed using tie & dye techniques on leather, Kutch.
- Handicraft & Handloom Export Council of India. (2001). A range of objects developed using embroidery techniques on leather, Kolhapur.
- Indian Navy. (2001) *Sea India* Pavilion design, art direction, and execution of the multimedia installation and exposition, on the occasion of International Fleet Review, Mumbai.
- Port Trust of India. (2000). *'Maritime Expo'* Design, art direction, and execution of the exhibition stall, Goa.
- Mumbai Maritime Gallery. (1999). Color and Material coordination for the permanent display. Mumbai.
- Vasant Seth Foundation. (1998). Exhibition design for Kala Ghoda Festival, *'Sea beyond the wall'*, Mumbai.
- Mukand Overseas. (1997). Exhibition systems designed for Messe, Frankfurt.
- Mukand Overseas. (1995). A modular display system for brass hardware, designed for Home + Houseware Show, Chicago.
- Indian Army. (1994). Grenadier's Museum, a multimedia concept design. Jabalpur.
- Pipavav Port. (1993) Art direction and display panel design, Mumbai.
- PVP- SNDT. (1990) Exhibition and display design and installation. Mumbai.
- GSL. (1989). Art direction and display stands design and installation. Goa and Mumbai.
- Modern Suiting's. (1989). Art direction and display design for the fashion show. New Delhi, Mumbai and Bangalore.

Luxury Yachts

- PIRATE BOAT. (2002) 60 feet Dhow Design of the Interiors and furniture for Sahara, Mumbai.
- HAVELI. (1997) 100 feet Dhow Restoration and design of the Interiors and Superstructure for Piramal Group of Industries, Mumbai.
- SHAZMA. (1995) 100 feet Dhow, Design and execution of the Interiors and Superstructure, for Dawood Shoes Co., Mumbai.

Retail Design

- AL-BOUYS. (2003) Concept and Identity for the electronic retail *'E-Mart'*, Riyad
- PHILIPS - Design of Domestic Appliance Service Station, executed across 52 cities in India
- PROLINE – Design of Flagship store –PRO SHOP in Mumbai and Pune
- BUSINESS LINK. (1989). Design and execution of First Computer Retail Store, Mumbai.
- CREATIVE SMILE.(1994) Design and execution of the interiors of dentist clinic, Mumbai.

Office & Home Interiors

Design and turnkey solutions for interiors of offices and private homes executed in Mumbai, India. Each project was designed and customized to clients' needs, and the project was incorporated end to end processes, providing all required services including design of interiors, electrical service, woodwork, plumbing, and furniture. Selected client's list in Mumbai: Monica Sahni. (2004), Gul Takechandani (2003), Bagrodias (2001), Kishco Pvt. Ltd. (1995), Dawood Shoes. (1990), Mukund Iron & Steel Co. (1990), Achrekar. (1989), and GSL. (1989).

SIMRUN S SETHI

Teaching

University of Illinois, Urbana Champaign, IL.

School of Art + Design. BFA Program.

ARTD 426 - Product Innovation

ART 105 - Visual Design for Non – Majors

ARTD 201 - Industrial Design: 1

ARTD 202 - Industrial Design-II

ARTD 270 - Design Methods

Geis College of Business: MSBA Program.

BADM 329 - New Product Development

BADM 333 / 533 - Sustainable Product Design & Marketing Plans I: Bottom-Up Immersion in Subsistence Marketplaces

BADM 590 - Product Design & Development

Grants

Funding received for Research and Travel

November 2019	\$500 - College of Fine and Applied Arts \$833 – Gies College for Business
July 2021	\$500 - College of Fine and Applied Arts
January 2021	\$500 - College of Fine and Applied Arts

Service

University of Illinois, Urbana Champaign, IL: 2019 - 2020

Member Convocation Committee

Member - Off-Site Learning Committee

The iVenture Accelerator –mentor to student- led startups.

Member Admission Committee – Industrial Design Graduate Program

Jury member for IDSA Awards.

Ansal University, Gurgaon, India: 2013 - 2017

Sushant School of Design. BFA Program

Coordinator- Outreach program

Chair- Faculty recruitment search committee

Member - Student Exhibition Committee