

**Handbook for Research Practices Consortium and Internship  
Faculty, Students and Consortium Members  
School of Architecture, College of Design, University of Minnesota**

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The College of Design has established a Consortium for professional practices, non-profit and other entities to work with faculty and students in the College. This handbook outlines the procedures and processes for working with students in the School of Architecture enrolled in the Intern Development Program (IDP) and the Master of Science in Architecture, concentration in Research Practices (MS-RP). Unique to the MS-RP program are two complementary but independent components: Research Internship and Practice Internship. In some cases, students may enroll in a 3 credit Directed Study in lieu of the Research Internship. Consortium Members may participate as members without participating in the Practice Internship. Generally it is expected that Consortium members will engage in Practice Internship at least one semester per academic year.

IDP is administered by the National Council of Architectural Registration Boards (NCARB) and this handbook does not supersede any policies or procedures established by them. The Research Practices Consortium is governed by the Research Practices Agreement, this handbook does not supersede any information in that document.

**Terms of Reference:**

*Consortium*, refers to the group of firms

*Consortium Member*, refers to an individual firm in the consortium

*Faculty Advisor* works with student on Research Internship

*Knowledge base*, a keyword searchable database of case studies, best practices and research information gathered by students in the Research Practices Internship

*Research Internship (RI)*, 10 hours per week over the 19.5 weeks University graduate student position

*Research Practices Internship*, combined complementary internships Research + Practices

*Practice Internship (PI)*, 15 hours per week for 15 week semester

*Practice Mentor* (for PI), work with student on Practice Internship, also serves as IDP Supervisor for student

*Research Practices Program*, used to describe the synergy between consortium, faculty and students

*Summer Internship*, typical market defined summer internship working on billable projects for firm

*IDP Coordinator for the School*, helps students develop individual IDP plans

*Master of Science in Architecture, concentration in Research Practices (MS-RP)*, a 30 credit advanced degree

*Plan C Coursework*, School defined coursework to fulfill University requirement of Plan C Research Practices Final Project

**Reference Documents** (as attachments)

- A. Program plan for MS-RP
- B. Syllabus for MS-RP Final Project

**General description:**

Consortium firm members work with faculty individuals or groups to define a research agenda, identify relevant projects past, present or future and outline skills and steps needed to achieve goals for the semester. Two aspects of the semester are complementary but should be defined independently: the research internship objectives (IDP experience-setting O) and the practice internship (IDP experience-setting A) objectives. The two internships work in conjunction and together are called "Research Practice Internship".

Following RP program guidelines, faculty member writes a work-plan describing the goals, criteria for success for the research internship, consortium member writes a work-plan for the practice internship. Communication with the student should include both research and practice internship with a clear understanding of the relationship between the two and relevant course work.

### **Culture and Communication for All Participants**

shared commitment, shared goals, knowledge sharing  
exploration and spirit of academic setting

high aspiration outcomes that maybe shared consortium-wide or specific to one Consortium Member

In general, communication among consortium, faculty and students will be handled through the Director of the MS-RP, Renée Cheng, AIA, Professor and Head of the School of Architecture.

### **Cost / Value to Consortium Members:**

Members of the consortium pay a fee to the College of Design of \$9,000 for an academic year (August through June). This fee does not include salary paid to student (see below). Membership provides the following benefits (see agreement for exact terms):

- right to promote consortium membership in marketing materials
- access to research materials, resources and faculty expertise
- opportunity for placement of a highly qualified student specifically matched to member organization
- student research time over and above salaried position (see 5)
- use of narrative and graphics produced by student as a result of the research
- participation in exclusive bi-annual consortium meeting where research is presented and consortium goals are developed

Consortium members can participate at a variety of levels, but the minimum participation is:

- Annual membership fee
- Employment of summer intern at typical internship market rate and terms
- At least one and not more than four semesters hosting Research Practice Internship

For this initial phase of the consortium, we ask for a commitment of three years from each member. In certain cases, two or three firms may jointly fulfill a three year commitment.

### **Eligibility of Consortium Members:**

The Research Practices Consortium is intended to include diverse members of the design and building industry. Members need not have licensed architects on staff, but should be involved with research that impacts architects, their clients or consultants and utilizes their expertise.

Since the MS-RP incorporates IDP which requires licensed architect supervisors for the Practice Internship, those consortium members unable to provide licensed supervisors should collaborate in a consortium-wide research project and/or with one of the faculty who is licensed.

Consortium members with licensed architects on staff will make a good faith effort to provide a licensed architect as supervisor for the student work and this architect will serve as the IDP supervisor and approve hours applicable to IDP. Consortium members will make a good faith effort to provide work experience in the IDP training areas requested by the student.

### **Faculty time:**

Faculty expertise and availability is matched with the consortium goals, firms and students. Faculty advise for the Research Internship or Directed Study component. Faculty should budget their time carefully, faculty honorarium per student (or student team) for supervision of research internship includes time spent:

- in meetings with the firm (minimum of one meeting must be face to face in the workplace setting with all participants)
- in meeting one-on-one meetings with the student

- in meeting with the consortium members or work time to develop the workplan
- attendance at the consortium meeting with a presentation of all research outcomes
- supervision of quality publication for consortium database and other publications as required

Research Internship mentoring does not include:

Time for faculty development of software skills, travel to conferences related to the work, or time to write academic papers or grants etc. If such activities are critical to the success of the research goals, additional fees from the consortium member may be requested or faculty should use development funds from the University.

Faculty mentoring time is a minimum of 20 hours over the semester, suggestion for use as follows:

- 4 hours initial set up to identify the research topic, define goals and criteria and develop workplan
- 8 hours check in meetings during the semester
- 3 hours wrap up and evaluation of research
- 3 hours attendance at consortium meeting
- 2 hours supervision of student report to consortium format

If additional time is critical to the success of the research goals, additional funds from the consortium member may be requested or outside research funds from University or other entities may be used. Faculty may combine supervision of multiple research internships on related topics or firms.

#### **Workplan for Research Internship or Directed Study:**

Please refer to RP workplan template [template document to come]

Faculty should initiate a written workplan which describe the student research, criteria and goals/outcomes appropriate to 10 hours per week for 19 weeks or 3 credits. Additionally, the workplan will describe how the student Research Internship is expected to interface with the paid Practice Internship time.

#### **Workplan for Practice Internship**

Please refer to RP workplan template [template document to come]

Using the Research Internship workplan as a base, student will develop a complementary Practice Internship workplan in consultation with Practice Mentor and Faculty Advisor. The Practice Internship workplan describes planned activities, allowing for changes that are inherent to the unpredictable nature of consortium member's work. Student will submit the workplan and provide curriculum vita (cv) listing relevant skills and experience and a desired IDP training unit plan.

#### **Matching Process**

Matching appropriate faculty, student, firm and consortium-wide goals is done by MS-RP program director. We expect that Consortium Members will participate in at least one consortium-wide goal and at least one firm specific goal over a three year period. Consortium member has right of review and can request an alternative student and/or revisions to the work plan within reason. If the student or workplan cannot be agreed upon, the consortium member has the right to withdraw from the consortium as per terms of Agreement.

Each consortium member will agree to hire the student for a minimum of fifteen (15) hours per week for fifteen (15) weeks of a typical semester. It is expected that the student will be paid at a market rate for an individual of comparable skills and experience and that the student's compensation (including benefits) will be consistent with the compensation provided by the consortium member to its employees or contractors who are similarly situated.

Student Research Internship will be coordinated with Practice Internship as described in the workplan. Research time will benefit the consortium member but cannot be assigned to direct billable hours. Research time is, at minimum, ten (10) hours per week for the nineteen (19) week University payroll period. Students will receive research stipend or 3 credits of directed study for this work.

### **Student IDP Plan**

Students are responsible for their own path to complete IDP, however, the Practice Internship mentor may also serve as the IDP mentor and supervisor if appropriate. Additionally, the School of Architecture IDP coordinator will serve as a resource. Each student participating in the Research Practice Internship will have an IDP completion plan that should include previous experience, work in the Research Internship, the Practice Internship, planned use of the Emerging Practitioners Companion (EPC), competitions and other activities approved by NCARB. Consortium members are informed of student IDP plans and make a good faith effort to provide opportunities over the summer or during Practice Internships.

### **Summer Internships**

Continuation of employment after the Consortium period is at the discretion of the Consortium Member and student. We expect this would be at market rate compensation. Consortium Members are expected to provide at least one summer internship opportunity for a UMN architecture student each year of Consortium Membership.

### **Shared Knowledge and Intellectual Property:**

It is expected that the Consortium will provide a forum for shared knowledge within the Consortium, within the University and to the broader community. The Consortium and related internships are *not* intended for pursuit of patented, proprietary or otherwise limited knowledge.

The University will own all rights in copyrighted works, patentable inventions and all other intellectual property created by a student as part of the research internship. It will grant each Consortium Member permission to use students' final research reports. Research from the internships will be formatted in reports, graphics and data that are organized in a knowledge base. Full access to the database will be provided to Consortium Members. Publications that result from the work will be cited and shared as any academic knowledge.

Each Consortium Member, under its agreement with the student, will own all rights in intellectual property created by the student it hires as part of the paid internship. It will grant the university a license to use copyrighted works authored by the student as part of the paid internship.

### **Research Practices Final Project:**

Each MS-RP student enrolls in two 4-credit courses that together form the RP Final Project. The scope of the work is defined in the syllabus, Fall semester focuses on the state of research in the Consortium Member firm, Spring semester documents a case study project in that firm. Ideally, the firm and case study are related to the RP internship topic, but Final Project is considered separately from the internship. This time is estimated at 180 hours during the fall and 180 hours during the spring over and above any time spent in internship.

### **Consortium Knowledge base:**

Student research feeds into a keyword searchable database of case studies, best practices and research information gathered by students in the Research Practices Internship and Final Project. While publications will be shared openly, the knowledge base is accessible by password to Consortium Members only. This allows consortium members access to the full set of information that underlies publically shared work.

### **Addition of grant-funded work, external sales of expertise, sponsored research**

The Research Internship can be combined effectively by expanding the research agenda beyond the Research Internship and Practice Internship. Typically this is funded by other means, grants, external sales or sponsored research. Funding can cover faculty time over and above the 15 hours budgeted to support the Research Internship. It may also cover additional faculty, college staff, or non-intern students or access to facilities such as the VRDL or Digifab Lab. Only in rare situations should it be used to increase the number of hours that a student spends on the Research Internship or the Practice Internship, since most students cannot manage additional time without adversely affecting their academic performance.

### Hierarchy of Goals

Ideally all components of the RP internship and final project work synergistically to promote collaboratively developed goals. However, in cases where agendas are not perfectly aligned, the following guides the priorities.

Activity	First priority	Second priority	Third priority
Research internship	Research goals defined in workplan	Benefit to faculty research	Benefit to consortium knowledge base
Practice internship	Research goals defined in workplan	Student individual IDP needs	Firm billable hours
Final Project	Completion of student academic work	Add to consortium knowledge base	benefit to consortium member

### FAQ:

#### Students

*If I am a student in the Master of Science in Architecture, concentration in Research Practices (MS-RP), am I guaranteed a summer internship?*

Unique to the MS-RP are several components that are dependent on economic conditions. We have every expectation that while you are enrolled in the program, summer internship and fall and spring Research Practice Internships as listed in your program plan, will include paid Practice Internships. On the rare occasion, when a paid position is not possible, alternatives for the Research Practice Internships will ensure that you can continue to make progress towards completing your degree.

Typical admissions cycle is complete by April 15, allowing time for optional summer internship before Fall course work begins.

*For a high achieving student, how is the Research Practice Internship (RP Internship) different than a typical market defined internship in a firm? How is it different than a Research Assistant or Teaching Assistant position at the U?*

The RP Internship is a unique combination of a typical firm internship and a University Research Assistant position. The total financial payment to the student (\$7300/semester) is the same as a Research or Teaching Assistant position at the School. In the RP Internship, funding source is split between a tuition reduction paid by the school (\$4000) and salary paid by the firm (\$3300 or more depending on your experience level). There are slight differences in the University Health Insurance terms (see student agreement). The IDP hours earned in an RP Internship is the same as the combined total of hours earned in practice (15 hours x 15 week/semester = 225 hrs/semester in IDP experience-setting A) and earned in assistant position during the University payroll time period (10 hours x 19.5 weeks/semester = 195 hrs/semester in IDP experience-setting O).

The core advantages of a RP Internship over a typical internship and/or assistant position is the synergy between the two. Also the firms commit to helping meet your IDP plan goals as best they can within the research goals of the project.

*Why should I sign over my intellectual property (IP) rights to the University? Does this mean I can't claim the work?*

Regardless of IP ownership, the work will be cited as your authorship, with appropriate citation to the Faculty Advisor and Practice Mentor who may have contributed greatly to defining the research questions. You can use the work in your resumé and in your portfolio, you can also write articles on the research but need to inform your Faculty Advisor.

IP for work done under the firm employment (summer internship, practice internship) resides with the firm. IP for work done in the academic setting (Research Internship, Plan C Final Projects) would normally be shared between the U and student.

When we were developing the consortium, internship and the MS-RP, we compared with models in the building industry or at the U. Since the expected IP in our case has little or no likelihood of commercial value or “capitalization” leading to patents, it greatly simplified the consortium arrangements to have a single point of IP ownership (the University of Minnesota) for work produced in the academic setting.

**Firms:**

*Can we participate if we don't have licensed architects on staff?*

Yes, if you do not have licensed architects, your firm will need to collaborate with another firm and/or with one of our faculty who is licensed.

*What if our firm suffers an unexpected economic downturn and can't fulfill our commitment to hire students?*

It is impossible for any of us to predict what will happen in the future. We ask for a good faith effort to fulfill your commitment and good communication so we can explore options with as much advance planning as possible. See Agreement for terms of withdrawal from the consortium.

*Can we have interns working on billable projects?*

Summer Internships are exactly the same as typical summer interns, so yes they certainly can work on billable projects. During the RP Internship, the Practice Internship is allowed to be billable hours but we ask that the first priority be given to research goals and the second priority to the student's IDP plan. The Research Internship component, supervised by the faculty, *cannot* be billable. Final Project research work *cannot* be billable.

*Consortium-wide goals present the potential for leveraging research over many firms and several years, but what about our firm's specific research needs?*

We expect that each Consortium Member will participate in at least one semester pursuing a consortium-wide goal and at least one semester pursuing a firm-specific goal over the course of the 3 year initial membership period. During three year period there will be regular assessment by program Director to determine the appropriate balance of shared vs. specific goals.

*How do we pay for the consortium fee and internship?*

This is a business decision for your firm. The most common strategies we have seen from other models is payment for costs from marketing or research budgets. The most promising strategy we have seen is to explain the investment in terms of effort saved on projects or future projects. In this case, some of the costs may be possible to assign to project overhead.

In the case of non-profits or public entities who are prevented by their structure to pay for these costs, we are interested to partner for applying to foundations, many of which will only give to these entities. Our initial priorities are to approach foundations with interest in low cost housing, sustainable design and community-based design.

*Can we participate in the consortium without hiring students? Alternatively, can we hire more than one student at a time?*

We believe the value is inherently tied to employing students in the Summer and RP Internships, so during the course of a three year membership, we expect at least three summer internship slots and three semesters of

Practice Internship. Practice internships maybe distributed at the discretion of the Consortium member but are subject to student and faculty availability.

Some firms may wish for multiple interns to be employed concurrently and/or to have interns continuously throughout the calendar year. The School has some limitations in capacity, but generally expects we can fulfill demand for interns by firms.

*How do get a student and faculty member that matches our needs?*

The matching process is a very important to successful outcomes. The School lists faculty expertise but cannot guarantee their availability will match firm needs. Depending on the expertise and the project, the timing of the work may need to be accelerated or delayed to match with faculty availability. The firm has the right to reject a student candidate for any reason and every effort will be made to make a positive match.

*What if halfway through the internship, things aren't working well? Or something changes in the project or personnel?*

We make every effort to plan in advance and to effectively match students, faculty and firms to ensure success. If something goes wrong, regardless of fault or not, there will be mediation efforts with the program coordinators.

**Faculty:**

*What is the difference between mentoring a RP Internship and supervising a typical Research Assistant?*

In one way, they are similar. Your research expertise will guide and inform the work. The main difference is that you are advising only one component of the research, the complementary practice research must be integrated into the student's priorities.

The timing of the research internship is the same as the typical payroll period, which begins before the semester starts and end after.