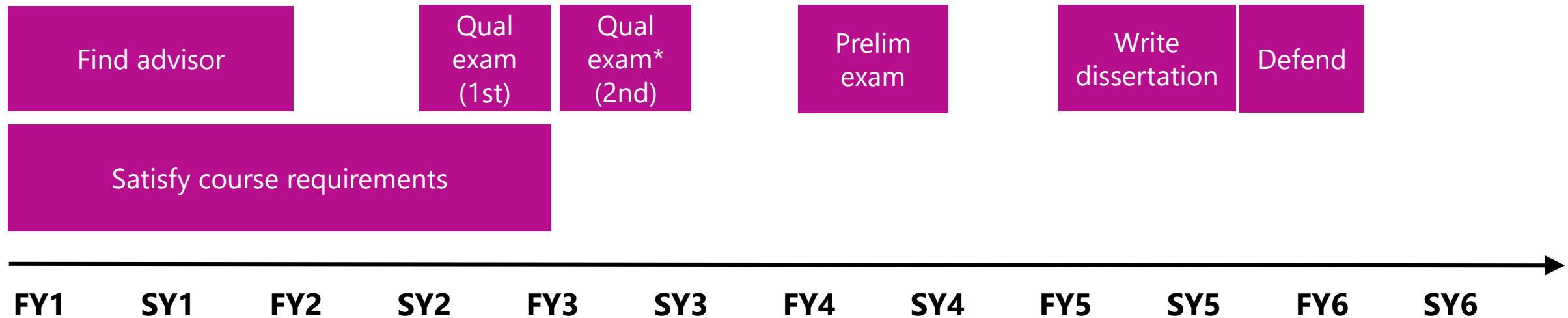


PhD Requirements, Milestones, and Strategies

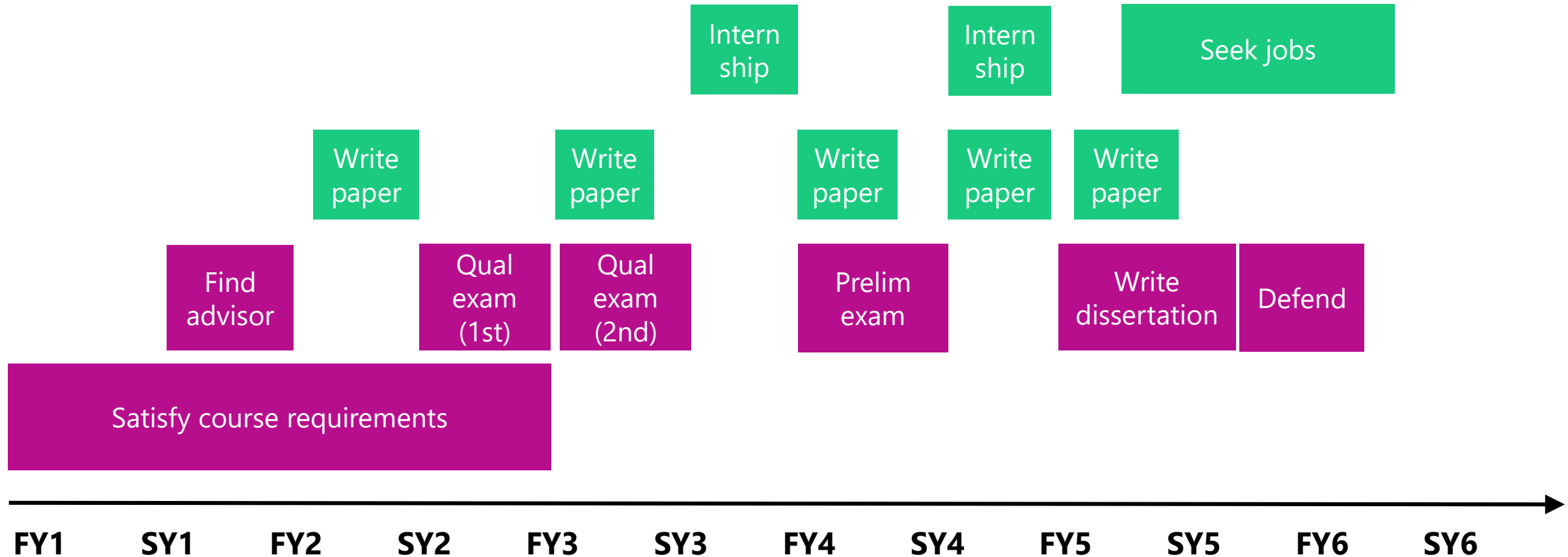
Model Timeline

 Required



* = if needed

Model Timeline



Discussion

- Milestones are not easily bounded in time
 - Example: writing a paper may require multiple revisions / submissions, preparing a talk, and travelling to present the work.
- Milestones are not always mutually exclusive
 - Example: each paper may become a chapter in the dissertation.
- Must also satisfy the TA requirement

Time limits

- 7 years without M.S. degree
- 6 years with M.S. degree from outside UIUC
- 5 years with M.S. degree from UIUC
- Annual evaluations of progress

Return on investment strategies

- Select topics aligned with peers in your research group
- Synergies between research and course projects
- Only accept research-oriented internships

Milestones and Strategies

Milestone 1: Find an Advisor

- Take courses, ask peers, attend group meetings and seminars
 - prepare and make positive first impression
- Required prior to taking the qualifying exam, but recommended by the end of the first year

Milestone 2: Satisfy Course Requirements

- Required prior to graduation, but recommended by end of second or third year

Requirements	Entering with approved M.S. degree	Entering with B.S. degree
Credit hours:	Hours	Hours
Total Credit for the Degree	64	96
Thesis Research – CS 599 (minimum applied toward degree)	32	32
Course Work	16	48
500-level course work	16 (12 must be CS courses)	24 (12 must be CS courses)
400- or 500-level course work	16	24
Additional graduate-level course work or thesis research credit (subject to Other Requirements and Conditions below)	16	16
Other Requirements and Conditions (may overlap):*		
Minimum hours of CS course work	12	20

**Focus of program
of study form**

Discussion (without M.S. degree)

- Need about 12 courses in total (if each course is 4 hours)
 - Take 2 regular courses per semester for 3 years; or
 - Take 3 regular courses for 2 years (heavy load)

Program of Study Form

- List the courses you plan to take with rationale, and get three faculty to agree on the curriculum plan
- Area choice for Program of Study due November 16th
- Final Program of Study form due February 1st to the department
 - We recommend you work on this early

Course Strategies

- First two to three years, as needed afterward
- Don't take more than needed, use independent study (CS597)
- Take courses beneficial to your research
- Merge research and course projects

Milestone 3: Pass Qualifying Exam

- Test breadth and depth of knowledge in area
- Common format (but is area-specific)
 - Read 3 to 5 papers, in-person Q&A
- Two attempts, pass by end of third year

Prepare for the qualifying exam

- Take courses in your area
- Seek advice from students who took it
- Take paper critiques in courses seriously
- Write your own paper

Milestone 4: Pass Prelim Exam

- Consists of a document and presentation
 - document describes the plan and status
 - About 1/2 to 2/3 of the proposed work is already complete (write as if none of the work is done, then give status)
- Think of it as a contract
- Required no later than five semesters after passing qual

Form Prelim Exam Committee

- Requirements are complex, but main rules are:
 - 4 voting members
 - 3 members must belong to the graduate faculty
 - 2 members are tenured (Associate or Full professors)
 - 3 from the extended CS faculty
 - 1 member from outside the University

Example Committee

2 Associate / Full professors from CS

1 Assistant Professor from CS or is an affiliate

1 member from an industry research lab

Milestone 6: Write Dissertation

- 100+ pages of content
- Plan 4+ months for writing, including revisions
- Schedule defense once a near final draft is complete

Milestone 7: Pass Defense

- One hour presentation to the committee; open to the public
 - committee can remain the same as for the prelim
- Followed by 30 minutes of Q&A
- Followed by deliberation and a committee vote (P / F)

Final Milestone: Employment!

- Prepare research and teaching statements
- Prepare polished job talk
- Discuss career options and preparations next time

What you should be doing NOW

- Searching for advisor
- Exploring research groups
- Attending seminars in areas of interest
- Satisfying course requirements
- Reading research papers

End of Y1 milestones (lower bound)

- Have an advisor
- Have a research direction of interest
- Be an apprentice on an existing research project
- Get name on paper as non-primary author

In Conclusion

- The PhD program has many milestones to keep you on track
- Review and increase focus as they approach
- Some flexibility in individual cases, but don't assume
- Satisfy Y1 milestones