**New Undergraduate Program (Majors, Minors, Sequences, Certificates) Proposal
Illinois State University - University Curriculum Committee**

**Program Department**   Physics

**Submission Date**  Friday, November 15, 2024

**Initiator**   David Marx

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**Initiator Department**   Physics

**Coauthor(s)**   None

**Version**   3   **ID**   528

**Title of New Program**   Physics Accelerated Sequence

**Proposed Starting Catalog Year**   2025-2026

**1.**

**Proposed Action**

New Major

New Minor

✓

New Sequence

New Certificate

More than 50% of courses in this program are Distance Education

**Sequence Major**

Physics

**2.**

**Provide *Undergraduate Catalog* copy for new program.**

Minimum required credit hours: 82

* PHY 107
* PHY 110
* PHY 111
* PHY 112
* PHY 217
* PHY 220
* PHY 240
* PHY 270
* PHY 284
* PHY 307
* PHY 325
* PHY 340
* PHY 370 or PHY 375
* PHY 384
* PHY 407
* PHY 417
* PHY 425
* CHE 140
* CHE 141
* MAT 145
* MAT 146
* MAT 147
* MAT 175
* MAT 340

Take 6 credit hours among the following Physics electives:

* PHY 318
* PHY 320 or 420
* PHY 355
* PHY 371
* PHY 373
* PHY 375
* PHY 380a03
* PHY 380a05
* PHY 388

Take 4 credit hours of PHY 490.

Notes

PHY 375 may be substituted for PHY 370.

**3.**

**Provide a description for the proposed program.**

This is an accelerated degree program for undergraduates that will apply 12 credit hours of graduate work toward the undergraduate BS in physics degree. For most students that start in the program as freshmen undergradaute students, the program can be completed wihin 8 semesters.

**4.**

**Provide a rationale of proposed program.**

The master's degree in physics was fully approved in March of 2024. We already have three master's students in the program this fall and our program coordinator and policies are in place. Included in our proposal for the graduate program was the expectation that we would offer the accelerated degree (BS and MS in Physics) program, which the faculty has approved. We have several current undergraduate physics majors that want to pursue this program. We believe it will be very popular, providing a pipeline of students into the graduate program..

**5.**

**Describe the expected effects of the proposed program on existing campus programs (if applicable).**

All of the additional courses in the physics graduate program will be offered on a regular basis. Having additional students from the accelerated master's program will help increase enrollment in these courses, thus making them more successful. The additional coursework for this program is being fully offered in the physics program. No other programs are affected.

**6.**

**Provide a sample four-year plan of study that fulfills the following requirements:** 120 hours, 42 senior college hours (200 and 300 level courses) for 2023-2024 and earlier catalog years; 40 senior college hours for 2024-2025 and later catalog years, and 39 General Education Program hours or 36 hours with exemption. If the program is a BS program, show the BS-SMT degree requirement. If the program is from CAS, show Foreign Language Requirement (LAN 111/LAN 112). IDEAS and AMALI graduation requirements. Confirm General Education requirement exemptions on the General Education page of the current Academic Catalog.*4-year plans are not required for minor or certificate program proposals.*

The plan is attached.

Since the plan was attached as a document instead of being typed in this box, items cannot be changed. Note that the instance of PHY 387 should be changed to PHY 417 per Dr. Holland.

**7.**

**Describe the expected curricular changes required, including new courses. If proposals for new courses have also been submitted, please reference those related proposals here:**

All of the physics graduate courses have already been approved, no additional courses need to be developed or proposed.

**8.**

**Anticipated funding needs and source of funds.**

No additional funds needed.

**9.**

**No**

**Does this program count for teacher education?**

**10.**

**No**

**Is this an Interdisciplinary Studies program?**

**11.**

**The following questions must be answered.**

**Yes**

Have you confirmed that Milner Library has sufficient resources for the proposed program?

**No**

Are more than 120 hours required to complete a degree with this major?

**No**

Beyond General Education, does the major require more than 66 semester hours?

**No**

Does this sequence (if in a major) require more than 55 semester hours of courses in the major department/school?

**No**

Does this program stipulate specific general education courses offered in the major department/school as a part of the major requirements only if such courses serve as prerequisites for other courses required by the major?

**Yes**

Does this program stipulate specific course requirements (majors/sequences only) that also satisfy general education and/or IAI requirements?

Please specify those courses below.

PHY 110 and PHY 111 are IAI courses that are the foundation for all physics sequences.

**No**

Is the proposed program intended to be longer than four years (as indicated by the plan of study)?

**No**

Have letter(s) of concurrence from affected departments/schools been obtained?
*A departments/school is affected if it has a program with significant overlap or if it teaches a required or elective course in the program.*

Explain why letters have not be obtained.

All physics majors take the same mathematics courses. There are no new burdens on the mathematics department or its courses.

*If new window does not appear after clicking the View Support button,
please disable the "pop-up blocker" feature of your internet browser.*

**Financial Implications Form**

*If new window does not appear after clicking the View Financial Implications button,
please disable the "pop-up blocker" feature of your internet browser.*

**12.**

**Routing and action summary for New Program:**

[**Proposal Routing**](https://registrarforms.illinoisstate.edu/CurriculumForms/Support/Routing.aspx)

**1. Physics Department Curriculum Committee Chair**

*David Marx (website)*

David Marx

11/3/2024 8:18:12 PM

Signature

Print

Date

**2. Physics Department Chair/School Director**

*Daniel Holland (website)*

Daniel Holland

11/3/2024 9:01:46 PM

Signature

Print

Date

**3. College of Arts & Science College Curriculum Committee Chair**

*Todd Stewart (website)*

Todd Stewart

11/20/2024 12:28:22 PM

Signature

Print

Date

**4. College of Arts & Science College Dean**

*Rocio Rivadeneyra (website)*

Rocio Rivadeneyra

11/20/2024 2:46:07 PM

Signature

Print

Date

**5. University Curriculum Committee Chair**

*Joshua Newport (website)*

Joshua Newport

2/17/2025 10:27:38 AM

Signature

Print

Date

All new programs (majors, minors, sequences, certificates) are routed by the U.C.C. to the Academic Senate

**Comments**

**Comments from Version 1 from David Marx ( College Curriculum Committee Chair):**
Need to rive name of program and add FIF.
**Comments from Version 2 from David Marx (Physics Department Curriculum Committee Chair):**
The FIF is with the Provost and should be approved shortly.
**Comments from Version 2 from Todd Stewart ( College Curriculum Committee Chair):**
Hi. We voted to approve this proposal pending some updates. So, while I'm hitting the revise button now to allow changes in the system, I am empowered to approve a suitably updated proposal without seeking another vote. The issues we identified are:

(1) Delete the following text from the catalog copy:

For the MS in Physics, students are required to complete a total of 30 credit hours –
• 14 hours for the following core courses: PHY 417, PHY 425, PHY 440, and PHY 484
• 8 hours for research and thesis courses: PHY 490 and PHY 499
• 2 hours for graduate seminars: PHY 407
• Two courses selected from PHY 420, PHY 455, PHY 461, PHY 470, PHY 471, PHY 472, PHY 473, PHY 480, or PHY 488

You might also consider deleting the sentence before it, although that might be acceptable.

The problem is that accelerated programs are undergraduate only, and so the catalog copy must reflect that. The graduate degree is a separate thing that should not be included as part of the accelerated program. We do understand that this is confusing for departments, though.

(2) Description of proposed program question, this also should be amended to apply to the undergrad program only. So, it should be 8 semesters, not 10.
(3) The plan of study included as a supporting document should also have the 5th year graduate stuff deleted. Just focus on the plan for the undergrad portion, which is what the accelerated program is. And make sure the total hours in the undergrad plan add to 120 hours.

Thanks, Todd Stewart, Chair, CAS CC
**Comments from Version 3 from David Marx (Physics Department Curriculum Committee Chair):**
The FIF is with the Provost and should be approved shortly.