The MIT Women's Technology Program (WTP) is a four-week summer academic experience to introduce high school students to engineering and computer science in the summer after 11th grade. There are two curriculum tracks (EECS and MechE). The goal of the WTP-EECS curriculum track is to give these students an initial exposure to EE, CS and AI&D, and get them excited about learning more after WTP ends.

Due to the COVID-19 pandemic, WTP 2021 will be a virtual online program, not residential on the MIT campus. As a result, the CS and EE Instructors this year must start earlier than usual in the Spring Semester, revamping the curriculum and exploring ways to best deliver it remotely. The AI&D curriculum will be entirely new; that Instructor will be creating content “from scratch.” Ideally, the same person who develops the course curriculum (Spring Semester) will also teach the curriculum (Summer). However, if we cannot find such candidates we may consider dividing the roles into Spring and Summer commitments with collaboration.

WTP-EECS Instructors are MIT MS/PhDs or MEng students (Course 6 womxn preferred) who have a dedication to mentoring and teaching, and enthusiasm for EECS that they want to communicate to high school students. Instructors also act as career role models for the WTP students. Because this is a paid position, WTP staff must be physically located in the U.S. even though the program is taught remotely this year.

WTP is a collaborative, womxn-focused community aimed at empowering high school students from groups historically underrepresented and underserved in engineering. We plan to admit 20 WTP-EECS high school students for summer 2021. MIT undergraduate student Tutors (TAs) will assist Instructors in the summer; we are also seeking some undergraduates to help Instructors with the curriculum revamp process during the Spring.

2021 Schedule for WTP-EECS Instructors:

IAP & Spring: January - May

Estimated time commitment Jan – May: 8-10 hours per week (see below for possible compensation info).

What you will be doing: Virtual Curriculum Development and Tutor (TA) Interviewing

2021 Instructors will need to start developing the new online curriculum (lectures, daily activities, and projects for the high school students) for their topic in the Spring Semester. We plan to hire a few undergraduate students to help Instructors with this process, and another MIT student to explore how to set up the WTP online platform using existing MIT resources.

EE and CS Instructors have previous in-person WTP curriculum years they can use to start revamping for summer 2021. AI&D will be an entirely new curriculum (though this could just be a lecture/discussion series with no student homework). Instructors are encouraged to meet at least monthly with each other to collaborate. Instructors will also help interview and select the undergraduate students who will be the summer Tutors (TAs) in their classrooms.

Summer: June - August

Time Commitment: 100% WTP focus June 1 – August 15 (you won’t realistically have time for your Research)

June 1-25 – Final Course Preparation and Staff Training:

Instructors work independently the first week before the Tutors (TAs) start on June 7. As much of the curriculum as possible should be completed by then, and a work plan created for the Tutors in your classroom to help test the curriculum (lectures, labs, and homework) before high school students come online.

Formal Staff Training runs Mon-Fri June 7-25 (during the hours of 10am- 4:30pm ET each day). Instructors work with classroom Tutors to set up, test, and finalize the curriculum, labs, and equipment. (continued on next page)
Also attend training sessions in working with minors, effective teaching, collaboration, and teamwork. Give practice lectures in front of the entire WTP-EECS staff and incorporate staff feedback. Prepare class activities and presentations for WTP-EECS Student Orientation on the weekend of June 26-27.

June 26 - July 23 -- WTP 2021 in session (high school students are online):
June 26-27: Orientation Weekend (schedule TBD) There will be some activities for 2-3 hours on each day to welcome the high school students, introduce them to WTP-EECS staff and each other, set expectations for participation and coursework and set them up on their home laptops with MIT Kerberos.

June 28 – July 22 Classes will be taught LIVE (synchronously) Mon - Fri between 10am-5pm ET. Exact EE, CS, AI&D class schedules and Office Hours still TBD). There will also be a daily WTP-EECS staff meeting Mon-Fri (time TBD). Tutors will lead additional evening and weekend homework-help office hours (you may need to assist Tutors with planning these, and/or attend some sessions yourself).

Weekends Instructors should expect to spend time revising curriculum, correcting homework, consulting with the Tutors (though classes are not scheduled, we may have office hours for homework help Sunday afternoon/evening to prepare for Monday classes). Although WTP coursework is ungraded, we ask staff to monitor student progress and successes (notes in a spreadsheet) to notice students who may need extra help.

On the final day July 23 there will be closing activities/student presentations to celebrate student accomplishments with all of WTP (EECS and MechE). Events will include some invited guests from outside of WTP (donors and other people who have helped WTP). We will have some departure social activities (yearbook, talent show or games) that we hope Instructors will attend, to say goodbye to the students.

July 26 - August 15 -- Wrap-Up:
Instructors should spend the week of July 26-30 wrapping up the curriculum with their Tutors (this is the last week Tutors are working for WTP). Make notes for next year’s Instructor about what worked well (or did not), pack up any equipment. If we decide to write college letters of recommendation for the students, collect your impressions of each of the 20 students and what they accomplished and excelled at during WTP, and send to Cynthia Skier, who will write the letters this year.

Compensation:

During IAP and Spring Semester: Instructors may be able to be compensated for this time via Student Employment or a partial TA appointment (at the rate of $17/hour). Each Instructor must review her current funding to confirm this is allowed. International students are probably not allowed to work additional hours during the semester for pay.

Summer: Instructors receive a 3-month paid TA appointment; summer 2021 rates come out later in the spring, but are expected to be at least the current rates of SM/MEng $3478/mo, PhD $3805/mo. This TA appointment also fulfills the EECS department PhD degree TA requirement.

TO APPLY:
Note we have filled the EE Instructor position for summer 2021. We are currently seeking candidates for the CS and the AI&D Instructor roles.

1) Complete the Instructor Application Form: https://forms.gle/2661UeEssR515xY28

AND

2) Email your CV/Resume to wtp-eeecs@mit.edu.

MIT requires all WTP Staff to undergo a background check before final hiring. In June you will also be asked to sign the MIT Code of Conduct for Programs Involving Minors.