ARRL Teachers Institute

2018 Application for TI-1: Introduction to Wireless Technology

Application Deadline is May 1, 2018

Please complete the application on pages 1–6 electronically. Instructions for submitting the application are provided on page 7.

An Invitation to ARRL Membership!

ARRL membership is not required to receive a scholarship to attend ARRL's Teacher Institute, but we welcome your participation. Let ARRL open the doors for you to the exciting world of amateur radio.

As a member of ARRL, for as little as $49 per year, you will receive benefits that include our monthly journal, QST magazine, that will expand and enhance your amateur radio experience.

It's easy to sign up at www.arrl.org/join or you can include payment with your enrollment fee ($149 for ARRL Membership and TI-1 Application Fee). Take the next step as an active participant in ARRL and support the future of ham radio! See payment information on page 6.

Section 1 - Personal Information

Be sure to include contact information that we can use to communicate with you during school and summer months (phone number, address, and email). Make sure the email address(es) you provide will accept emails from @arrl.org.

Name _____ Ham Radio Call Sign (if any) _____

Home Mailing Address _____

City, State, Zip Code _____

Home Phone _____ Cell Phone _____

Home email address _____

School email address _____

Emergency Contact _____

Relationship _____ Phone _____

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Section 2 - School or Institution Information

School District _____

Name of School _____

School Mailing Address 1 _____

School Mailing Address 2 _____

City, State, Zip _____

School Phone _____ School Federal Tax ID# _____

Total Number of Students in School (all grades) _____

Grade Level(s) in School

                    K   1   2   3   4   5   6   7   8   9   10   11   12   C

Grade Level(s) You Teach

                    K   1   2   3   4   5   6   7   8   9   10   11   12   C

Subject(s) Taught _____

Extracurricular Activities (Clubs, etc.) _____

Estimated Number of students involved in your STEM-related clubs and classes _____

School Demographic Information

School classification (choose one from each row)

    Urban   Suburban   Rural   Other   _____

    Public   Parochial   Private   Other   _____

Percentage of overall student population that is

        Eligible for free or reduced price lunches _____%

        Eligible for Title 1 Services _____%

        Receive Special Education services _____%

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Section 3 - Essay / Video Questions

Reply to the following questions in written form or by addressing the questions in a video. Please limit the total length of the video to no more than six minutes. You'll find instructions for submitting the video at the end of this application form.

3a. Describe your professional training and experience.

3b. Describe your school environment and your current teaching assignment.

3c. What do you anticipate your students will gain as a result of your participation in this workshop? How will this "fit" in your curriculum?

3d. Briefly describe any professional development or continuing education workshops you have attended during the past 5 years. How did you implement what you learned in your teaching assignment, and how did your students benefit?

3e. Where do you see yourself professionally in 3 years? in 5 years?

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Section 4 - Pre-Institute Survey

The purpose of this survey is to provide a sense of participants' familiarity with the material to be covered at the Teachers Institute so that we can adjust the curriculum and presentation of the content during the Teachers Institute to better meet your needs. Your honest and considered responses on this survey will help us provide the best possible learning experience for everyone. We will not base your selection for the Teachers Institute on these answers.

Please use the following rating scale to evaluate your ability to explain the topics below:

1 – little knowledge

2 – some very basic knowledge

3 – working knowledge

4 – some experience teaching this topic

5 – competent to teach in this area

	Describe basic electrical components (names, identification, use, measurement)
	Describe fundamental laws of basic electronics (Ohm's Law/Thevenin's Theorem)
	Explain how radio waves travel
	Describe how signals are generated by electrical circuits
	Explain how radio is used to send information (basics of modulation)
	Define what a microcontroller is and describe its general operation
	Explain how radio and infrared signals are used to control devices remotely
	Identify the main components of a robotic system

Section 5 - 2018 TI-1 Session Preferences

The following TI-1 sessions have been scheduled for summer 2018. We will review applications and assign qualifying applicants to one of the sessions based on session preference, ability to attend, and travel distance. Indicate both your first and second choice of session, and whether you could attend each session as scheduled.

Dates	Location	Choice (1 or 2)	I can attend (yes or no)
July 16-20, 2018	Dayton Amateur Radio Association Dayton, Ohio		
July 23-27, 2018	ARRL Headquarters Newington, Connecticut		

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Section 6 - Teachers Institute requirements and acknowledgment

Check the boxes to acknowledge your understanding and acceptance of the following Teachers Institute requirements.

❒ Each participant must bring a laptop computer that meets the following specifications:

Windows
   Windows 7 or later operating system
   At least one available USB 2.0 or 3.0 port*

Macintosh
   macOS 10.7 or newer operating system
   At least one available USB 2.0 or 3.0 port*

USB type-C   USB 2.0   USB 3.0

Some newer laptops have only USB type-C ports. For these, you will need a USB type-C to USB 3 type-A adapter or hub.
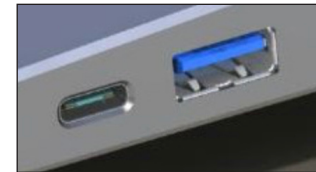
Apple laptops running Windows 7 or newer under Boot Camp, Parallels Desktop, or VMWare Fusion are acceptable if they meet all other requirements. *Laptops, netbooks, Chromebooks, and tablets running other operating systems are not acceptable.*

USB type-C (left)
USB 3.0 (right)

Make and model of laptop you will bring: _____

Operating System and Version: _____

❒ Participants *must* be able to install programs and drivers on the computer. Many school computers have security features that make them unusable during the Teachers Institute. If you are going to use a school computer, make sure you have FULL access to the computer, and that you test the accessibility before coming to the Institute.

❒ A $100 enrollment fee is required with your application. You may pay by check made payable to **ARRL Teachers Institute**, or by credit card. If your application is not accepted or the session is canceled, your enrollment fee will be refunded. If you are accepted, but circumstances prohibit you from attending, ARRL will refund your enrollment fee with 30 days advance notice.

❒ Participants are expected to pay for travel, hotel, and meal expenses and will submit an expense reimbursement form at the conclusion of the Teachers Institute. Receipts are required for hotel and travel expenses. Expect approximately 2 weeks to process your reimbursement.

❒ Reimbursable expenses include: up to $600 for travel, lodging for up to 6 nights in the ARRL-designated hotel, and $35 per diem for meals (no meal receipts required). To receive full reimbursement, participant must attend all days of Institute activities.

- ❒ Participants traveling from out of town should arrive the day before the Institute, and should schedule departure after 6 pm on the final day of the Institute or the day after the Institute. Early departures on the last day of the Institute to meet flight schedules are not acceptable, as important material is covered right up to the end of the final day.

- ❒ Hotel accommodations are planned for arrivals the day before and departures the day after the Institute (up to 6 nights total). Accommodations for additional days or at locations other than the designated hotel are the responsibility of the participant.

- ❒ Participants are expected to attend Teachers Institute sessions from 8 a.m. to 4 p.m. each day. Attendance at optional evening activities, if any, is encouraged but not required.

- ❒ Each participant must complete a workshop evaluation at the conclusion of the workshop. Participants may be asked to provide feedback in the future about the training and resources provided during the Institute, and their effectiveness in student learning.

- ❒ Expenses and instructional resources provided by the Teachers Institute are paid for by donations to the ARRL Education & Technology Program Fund, and do not come from ARRL membership dues.

- ❒ The Teachers Institute is a professional development activity and therefore children would not be appropriate at the Teachers Institute. There are no accommodations for child care.

Section 7 - Signatures

I have read the above requirements and will follow the ARRL Teachers Institute Travel and Reimbursement Guidelines and Procedures.

_____   _____
Applicant's Name (Print)   *Administrator's Name (Print)*

_____   _____
Applicant's Signature   *Administrator's Signature*

Section 8 - Payment Information

I am paying by   credit/debit card   check (payable to ARRL Teacher Institutes).

$ _____ Total   Charge to: Visa   Mastercard   AmEx   Discover

Card Number _____   **Expiration Date** _____

Cardholder's Signature _____

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Section 9 - Submitting your application

Refer to the application checklist in **Section 11** to be sure you submit all required items. All components of your completed application and enrollment fee must be received at ARRL by the application deadline, **May 1, 2018**.

To submit video as part of your application, refer to the instructions in **Section 12**.

By Mail - Print your completed and signed application, and send it with the cover letter and check or credit/debit card payment of the $100 enrollment fee to:

> **ARRL Education & Technology Program**
> **Attn: Ally Riedel**
> **225 Main Street**
> **Newington, CT 06111-1494**

FAX - You may fax the signed application, survey, and cover letter to (860) 594-0259. Please include a fax cover sheet addressed to **Attn: Ally Riedel**. The enrollment fee may be paid by check or credit/debit card.

Email - scan and send your cover letter and completed and signed application electronically to Ally Riedel at ariedel@arrl.org. Please include your name in the document title. For example: "JSmith TI application 2018.pdf". We prefer documents in PDF format. The enrollment fee may be paid by check or credit/debit card.

Section 10 - Admission decision announcements

We will make every effort to advise you of our decision on your application and your session assignment by May 15. We will contact you at the email address you have provided. If you have not heard from us by that date, please feel free to contact us.

Please direct questions regarding your application for the Teachers Institute to ariedel@arrl.org or call Ally Riedel at (888) 277-5289 x367 or (860)594-0367.

Section 11 - Teachers Institute Application Checklist

Include all of the following to complete your application:

☐ Cover letter on school letterhead stating your desire to attend, signed by you and a school administrator.

☐ Completed application form, including essays or video, self-assessment survey, and signatures. (Pages 1–6 of this document)

☐ Check or credit card payment for the $100 enrollment fee, payable to the ARRL Teacher Institute. If you are not accepted, the enrollment fee will be refunded.

☐ OPTIONAL - Check or credit card payment for $49 for your ARRL membership.

Section 12 - Instructions for Submitting Video

via YouTube

If you're not familiar with posting video to YouTube, here's where you'll find an explanation of the YouTube upload process:

https://support.google.com/youtube/answer/57407?hl=en

YouTube does not allow you to use your webcam directly to make a video, but there are alternatives:

https://support.google.com/youtube/answer/57409?hl=en

If you do not want your video to be public, you may post your video as "unlisted" Here's how:

https://support.google.com/youtube/answer/157177?hl=en

Send the link to your YouTube video in an email to Ally Riedel at ariedel@arrl.org along with your application and cover letter.

via a File Sharing Site

You may post your video to a file sharing site such as Dropbox or Google Drive, then share the link in an email to Ally Riedel at ariedel@arrl.org along with your application and cover letter.

We will not accept video on any physical media such as CD, DVD, or flash drive.

Section 13 - Completing and signing your PDF form

Acrobat DC (Mac or Windows) - Open this document in Acrobat Reader or Acrobat DC. In the Tools Panel, choose Fill & Sign. Click in the first empty field and enter the requested information. Use **tab** to move to the next field. To add signatures to a field, click the Sign button at the top of the window, choose the signature, and move it to the appropriate location on the form.

Preview (Mac) - Open the document in Preview, click in the first empty field and enter the requested information. Use **tab** to move to the next field. To add signatures to a field, choose **Tools > Annotate > Signature** and choose (or create) your signature.