IEEE-Eta Kappa Nu

(REMOTE) INDUCTION RITUAL
Remote Operations Version: 2020.1

INSTRUCTIONS FOR THE INDUCTION TEAM

Induction Team Checklist (To be completed prior to the scheduled induction)

1. Select date and time for the induction ceremony as well as the medium to be used to deliver it. The ritual induction requires that candidates be able to see a shared screen. As such, chapters are encouraged to use Zoom, Webex, or Google Hangouts Meet. Should your chapter wish to hold multiple inductions, you may do so to accommodate a large candidate class.

2. Identify 6 officers and/or advisors to serve on the induction team. Assign each team member a backup part such that if the primary reader loses their connection, the backup may take their place. For example, if the treasurer loses their audio connection, the news correspondent knows to step in and take over the treasurer’s part.
   a. A minimum of 4 officers can serve as the induction team. The President, Vice President, and Recording Secretary should ideally be read by different people while the remaining parts can be read by a single inducted member.
   b. Recommendation: Hold a practice session and make sure everyone has a copy of the induction ritual (customized for this induction)

3. Edit the Eta Kappa Nu - Remote Induction presentation and add your chapter’s designation (e.g. Nu Alpha) and the date of your induction.
   a. If using Google Slides, create a copy of our read-only slides and edit for this semester’s induction

4. Determine if you will be including a chapter history and alumni section (optional and in purple). If you will be including a local alumni and chapter history section:
   a. Identify one or two prestigious chapter alumni to highlight.
   b. Create one slide for each chapter alumnus that you will mention. These slides
should match the existing voices from the ritual. Should you have questions, please don’t hesitate to contact the chair of the Membership & Chapters committee, Michael Benson, mbenson@ieee.org

5. Share an alphabetical list of candidates that the chapter has elected to membership with all members of the induction team. This list should also include a pronunciation key for each name such that every member of the induction team can correctly pronounce each name. All members of the induction team should practice speaking each name such that they are comfortable doing so.

**PRE-INDUCTION INSTRUCTIONS**

1. Instruct the induction team to join the meeting (Zoom, Webex, Google Hangouts, etc) 15 minutes prior to the time provided to the candidates to join. Use this time to review any last minute concerns and to ensure that the team’s audio connections are properly working. All team members should be in a dimly lit room with a single light source, perhaps a phone flashlight, illuminating them.

2. Prior to the specified time for candidates to join, the member hosting the *Eta Kappa Nu - Remote Induction* Slide Deck should enter presentation mode and share their screen.

3. Instruct the candidates to join promptly at the specified time. Allow a few minutes (up to 10) for stragglers to join. Encourage the candidates to test their audio connections and then to mute themselves.

**POST-INDUCTION INSTRUCTIONS**

1. Most chapters host a social activity following their induction ceremonies. These activities often include a banquet or other activities whereby members of the chapter can congratulate their newest members as well as to continue to get to know one another. A virtual induction doesn’t lend itself to such a feast. However, chapters are encouraged to schedule a 30-minute activity following the conclusion of the induction ceremony. Some options include:
   a. Asking a faculty member to observe the induction and to offer a short talk following its conclusion on the role of Eta Kappa Nu inductees in the world
   b. Requesting a member of the IEEE-HKN Board of Governors to attend the induction and to speak following the conclusion of the ceremony. These speeches might last 10 - 20 minutes and include significant time for Q/A.
   c. Use your communication method’s *breakout room* feature to divide the chapter into small groups. Ask each to play a modified version of virtual
pictionary for a period of time (10 - 20 minutes) and then to come back and share with the full chapter. Instruct the small groups to start with a statement about a member of the group. See the Appendix for the rules to a modified virtual Pictionary.

d. Host a discussion with the chapter to discuss the current environment and to solicit ideas for additional chapter activities.
   i. E.g. what online service activities can we do together?
   ii. Should we host a virtual book club?
   iii. Should we host a board-game night?

e. Other ideas along these lines, or anything else you might think of. Please report these as chapter activities so we know what ideas to include in the future!

2. The members of the induction team should note any issues that they encountered during the induction ceremony and share them with the chair of the membership and chapters committee, Michael Benson, mbenson@ieee.org
[Note, other than the President and Vice-President, all indicated officer titles are optional, and the Chapter may assign roles as deemed appropriate to other members of the induction panel. It is strongly encouraged that female officers or members of the Chapter present material associated with Drs. Hopper and Clarke.]

President: (Raps gavel three times. If no gavel is available, knock loudly on a hard surface to imitate the sound of a gavel.) This meeting will please come to order. My name is <insert name>, President of the <Name of Chapter> Chapter of IEEE-Eta Kappa Nu. [Take down SLIDE 1 and ensure that the president’s face (video) is visible to all attendees.]

In normal circumstances, we would all be together, in the same room to conduct this induction and to celebrate your accomplishment. Due to the current situation, this is not possible. However, we are taking care with this remote ceremony to ensure an experience as close as possible to that of the traditional ceremony. Before proceeding further, I will ask that each of you ensure that you are in a dimly lit room and that you can readily mute and unmute your audio connection. There will be moments in the ceremony where you will be asked for a response so please be sure to unmute yourself when requested.

Should your connection fail, please reconnect as quickly as possible and mute yourself. Please take a moment now to ensure that your audio connection is unmuted as we take attendance. [During this
time, please ask each candidate to respond when their name is called. If a candidate’s audio connection isn’t working, ask them to attempt to fix it, or to join the audio through a different means such as a phone call.]

[Slide 2] In honor of the great thinkers that built the foundation upon which the fields associated with IEEE-Eta Kappa Nu are based, our induction panel will speak as these pioneers might have spoken to you on the occasion of your initiation.

[Optional] The Chapter may choose to insert one or two notable alumni of their programs into the ceremony for the purpose of discussing the history of the school and/or Chapter. In the example provided below, Beta Chapter incorporates Edward Mills Purcell and Reginald Aubrey Fessenden. These chapter alumni should be added to the slide deck and displayed when mentioned.

Members of IEEE-Eta Kappa Nu and guests, I am informed that there are <insert number of candidates present> present candidates for their initiation and induction into our society.

Our Recording Secretary, <Name of Recording Secretary>, will now speak on behalf of Charles Wheatstone, whose invention serves as our organization’s emblem. Are these candidates worthy and well-qualified? [SLIDE 3]

Recording Secretary (on behalf of Wheatstone): They are. Their qualifications have been reviewed and I can vouch that each possesses the three qualities that we seek to recognize – Scholarship, Character and Attitude.

Scholarship includes outstanding traditional academic abilities. However, these abilities must be complemented by a good supply of common sense to make the acquired knowledge, information, and ideas more useful.

Initiates must possess unimpeachable Character. They must exhibit sound judgment, and both capacity and willingness for hard work.

Finally, initiates must possess a positive Attitude. This includes a positive outlook on life, a congenial nature, and the ability to work in harmony with all people.

President: These qualities are indeed what we wish to honor.

Vice-President: Members of IEEE-Eta Kappa Nu, I now present the candidates for induction into the
<Name of Chapter> Chapter of IEEE-Eta Kappa Nu. Candidates please stand. [SLIDE 4]

(The Vice-President now gives the full names of each of the candidates.) These candidates, having been elected by <Name of Chapter> Chapter, of IEEE-Eta Kappa Nu, have expressed their desire to be initiated into this organization.

President: Candidates, your records have been examined and the members of this Chapter have observed your conduct. You have been found to possess the three qualities this organization seeks to recognize. We meet together to inform you of these qualities and to instruct you in the purposes, objectives, and ideals of the IEEE-Eta Kappa Nu organization. In admitting you into IEEE-Eta Kappa Nu we are conferring upon you the highest honor that is within our power to bestow. Please be seated.

Our Corresponding Secretary, <Name of Corresponding Secretary>, will now speak on behalf of William Gilbert, who published “On the Magnet and Magnetic Bodies, and on the Great Magnet the Earth” in 1600. This book detailed his studies of static electricity using amber, and was the first to call its effect “the electric force”, leading historians to name him the first electrical engineer. Prior to hearing from Gilbert, please dim your lights and be seated. [SLIDE 5]

Corresponding Secretary (on behalf of Gilbert): The purpose of IEEE-Eta Kappa Nu is best stated by the first section of our Operations Manual:

"... to encourage excellence in education for the benefit of the public by recognizing individuals who have conferred honor upon engineering education by distinguished scholarship, activities, leadership and exemplary character as students in electrical or computer engineering, or by their attainments in the fields of electrical or computer engineering..."

It was for that reason that Maurice L. Carr, a student at the University of Illinois, together with nine others who shared his faith in such aims, founded the first chapter of Eta Kappa Nu at Urbana, Illinois, on October 28, 1904. The growth of Eta Kappa Nu over the past century demonstrates the value of these purposes. This development was strengthened by integration into IEEE, enabling the extension of the organization’s goals around the world. IEEE-HKN now comprises more than 200 chapters and has inducted over 200,000 members. This growth is an extension of the efforts of the founders and succeeding officers and members of IEEE-Eta Kappa Nu in the important work of preserving this organization. This importance derives from the high ideals of which you are soon to hear, and which this organization honors and propagates. These qualities are both requisite for success in electrical and computer engineering and related areas, and for happiness in one's life as a whole. To propagate these values, IEEE-Eta Kappa Nu demands that its members possess and
exercise all three qualities identified before.

President: We will now discuss the three central ideals of IEEE-Eta Kappa Nu. Regarding the first quality, Scholarship, our Treasurer, <Name of Treasurer>, will speak on behalf of John Bardeen, an electrical engineer and the only individual to receive two Nobel Prizes in Physics. [SLIDE 6]

Treasurer (on behalf of Bardeen): The first step taken in ascertaining the eligibility of persons for membership in IEEE-Eta Kappa Nu is that of determining their scholastic record. You have proved yourselves to be more than ordinary students, ranking in the upper one-fourth of your [Sophomore or] Junior class, or in the upper one-third of your Senior class. However, grades are not the perfect test of a person.

Beyond this scholastic test, IEEE-Eta Kappa Nu searches even further into people for common sense. How do they conduct themselves in unfamiliar situations? How do they proceed to use their equipment and tools in performing their work? Do they have ingenuity? Are their ideas practical and feasible? Do they have the necessary imagination for visualizing the complex problems of their domain, and for seeing new solutions to those problems? Do they have the communication skills to articulate these solutions to their organizations?

You have been measured by questions such as these and we have concluded that in addition to your scholastic abilities, you have a good supply of this “common sense.”

Now, with your membership in IEEE-Eta Kappa Nu comes a further challenge to improve your methods of thinking, to improve your resourcefulness, to improve your scholastic record. IEEE-Eta Kappa Nu wishes to foster the growth of your scholastic achievements and your present good supply of common sense, allowing you to develop yourselves toward the objective of excellence in your future professional careers.

President: As you have been informed, the scholastic requirements for a member of IEEE-Eta Kappa Nu are rigorous. They are meant not only as a test for membership, but as a guide for future conduct as well. Further emphasizing this aspect of membership in this organization, our Vice-President, <Name of Vice-President>, will now speak on behalf of Grace Hopper, a computer scientist and developer of the first software compiler and the first programming language, regarding the second quality we seek in our members – Character. [SLIDE 7]

Vice-President (on behalf of Hopper): To make a success of any project, whether it be a college education, or a professional career, requires one common quality – character, including honesty, ethical behavior, sound judgment, and the willingness to perform hard and occasionally disagreeable work.

Remember that no full, permanent success can be attained by taking the path of least resistance.
You may temporarily achieve seemingly desirable results by slovenly methods; by taking credit not due you; or by refusing to assume responsibility for a task properly yours; but do not forget that slothfulness, deceit, and irresponsibility in your character are nearly always discovered.

One purpose of the duties you have performed as a part of the candidate process was to determine whether your character includes the capacity for hard work. As an IEEE-Eta Kappa Nu member, you have been marked as having superior talents and will ultimately receive extensive education and training. But given these advantages, do not make the false assumption that the world owes you a living. On the contrary, the members of IEEE-Eta Kappa Nu believe it is your responsibility to society to aid and assist whenever the need for something exists that is within your power to give. Rather than complain about an uninteresting or routine job, you must make the most of the materials you have at hand, and strive always to produce as creditable a product as is possible.

In IEEE-Eta Kappa Nu you will be asked to share the work and responsibilities of running the organization. You will find this an opportunity to gain new experience and new confidence in yourself, an opportunity to improve your Chapter, your organization, your community, and yourself. Cultivate your character and your capacity and willingness for hard work!

President: The second of the central ideals of membership in IEEE-Eta Kappa Nu has now been explained. Speaking on behalf of Michael Faraday, one of the greatest experimentalists in electromagnetics, our Recording Secretary, <Name of Recording Secretary>, will now explain the third quality – a positive Attitude. [SLIDE 8]

Recording Secretary (on behalf of Faraday): You are, for the most part, as others see you. The attributes you present to others reflect your attitude on life, and reflect upon you, your education and your career. Successful professionals reflect positively on their Alma Maters and their profession, both in their manner and demeanor. They are congenial, modest, and dependable; they are tolerant of the ideas and practices of others; they are unselfish; they display tact in their dealings with their colleagues; and they are good listeners as well as skillful communicators. These attributes reflect your attitude on life.

All people have these attributes to some degree; but, unfortunately, many do not cultivate or choose to apply them. Your election to IEEE-Eta Kappa Nu reflects our hope and belief that you have them; that you possess a positive attitude with a congenial nature and the adaptability for working in harmony with others, whether as a leader or contributor. Your membership serves as a means for you to grow these attributes as you interact with others, setting a strong example and reflecting well on those who have contributed to your career.

President: Now that we have explained the qualities that were required for you to be elected to membership in IEEE-Eta Kappa Nu, our Treasurer will speak on behalf of Charles Babbage, the
father of modern computing, to explain what we, in turn, expect of you. **[SLIDE 9]**

**Treasurer (on behalf of Babbage):** IEEE-Eta Kappa Nu expects nothing of you that you cannot, in honor, give to it. In no manner does it seek to take the place or function of any other society or organization. You honor IEEE-Eta Kappa Nu by proving yourself worthy of the honors that other organizations have to bestow. You have been elected to membership with confidence that yours are safe hands into which we may commit the direction and leadership of this chapter when it is left to you.

We ask that by your influence and example, you lead other members of IEEE-Eta Kappa Nu. Display the emblem of this organization with modesty, as a sign that you have exhibited the three central ideals of membership and as a reminder to yourself and to other members of the responsibilities of each member of IEEE-Eta Kappa Nu.

This organization now provides another channel for effecting better cooperation between faculty and student leaders in the work of improving your departments, your school, your community, and also your professions. You now have an added opportunity to develop closer relations with outstanding members of your fields. Above all, you have now a new means by which to improve yourself.

Fulfill the obligations imposed upon you by your admission into IEEE-Eta Kappa Nu. By so doing, you will make yourself a better professional and citizen.

**President: [SLIDE 10]** Having described to you the expectations placed on you by IEEE-Eta Kappa Nu, our News Correspondent <Name of News Correspondent> will speak on behalf of Edith Clarke, the first woman to be employed as an electrical engineer, and also the first to hold the position of Professor in that discipline, to explain the various elements of the organization’s coat of arms, our emblem and their historical significance.

(Whomever is operating the slideshow shows the coat of arms, and points out parts as they are mentioned by the speakers.)

**News Correspondent (on behalf of Clarke):** [Display the Caduceus, SLIDE 11] The Caduceus (pronounced ka-du'-se-us), wand of Mercury, who was the messenger of Jupiter, was preferred by our founder, Maurice Carr, as the symbol for Eta Kappa Nu. But another and older profession already had selected this symbol. Therefore, upon the honor point of the shield is placed the Caduceus as a memorial to him who founded this organization, in which so many now enjoy membership. Its field is scarlet, symbolizing the zeal with which Maurice Carr projected his idea.
The mighty hand of Jupiter was selected as being symbolic of the founding chapter with a blade of lightning for each of the ten founder members. The field is blue, typifying the loyalty with which they performed their task.

The band of silver has been charged with three cubes of magnetite to represent and thus remind you of our three central ideals.

The shield is crested with a Wheatstone bridge with the IEEE-Eta Kappa Nu colors of scarlet and navy blue entwined beneath. [SLIDE 15 than SLIDE 16 showing the progression of the Wheatstone bridge into the coat of arms]

At the center of the bridge is the galvanometer that senses when balance is achieved. It bears the early Greek form of the letters Eta, Kappa, Nu.

The Wheatstone bridge is our emblem. Though simple, the bridge is a precision electrical instrument capable of determining the value of an unknown element when knowing the values of the three other bridge elements.

The significant analogy drawn from it for IEEE-Eta Kappa Nu is the fact that only when the bridge is adjusted to be in perfect balance is the desired solution obtained. This is what we strive for as members of Eta Kappa Nu: to lead a balanced life, a life in which SCHOLARSHIP, CHARACTER, and ATTITUDE are jointly developed. When these three are properly balanced in the Wheatstone bridge, then the unknown, SUCCESS, is determined.

Remember then, when you look at the IEEE-Eta Kappa Nu emblem, that the Wheatstone bridge is symbolic of a balanced person.

In early Greece there was a philosopher, a “scientist” in our day, who discovered that if a piece of amber was rubbed with a cloth, the philosopher experienced a phenomenon that could not be explained. We know this “phenomenon” as static electricity. The Greek name for amber is “elektron.” Written using early forms of the Greek letters we obtain:

Η Λ Ε Κ Τ Ρ Ο Ν

Eta Lambda Epsilon Kappa Tau Rho Omicron Nu

From this word the English language derives the word “electricity.” From this name we have further derived the words electron and electronic. And from this name our organization derives its name. We use the first, the fourth, and the last letters, namely,
President: Having explained the purpose, central ideals and devices of IEEE-Eta Kappa Nu, you will shortly become full members of this organization, inducted into Beta Chapter here at Purdue University. Prior to this important occasion, the history of this Chapter and School will be presented in the context of two scientific pioneers who were shaped in part by their time at Purdue University. First, a brief history of the field of electrical and computer engineering at Purdue University will be presented by our Recording Secretary on behalf of the first head of electrical engineering at Purdue University, Reginald Fessenden, the first person to transmit voice wirelessly.

Recording Secretary (on behalf of Fessenden): The fields today associated with electrical and computer engineering were first taught at Purdue within Mechanical Engineering, beginning in the early 1880s. The growth of research in this area, motivated by the inventions and business aspirations of such prominent personalities as Tesla and Edison, led to the formation of a Department of Electrical Engineering, with associated faculty, in 1888. This Department, later School, was renamed the School of Electrical and Computer Engineering in 1995(?), and has over X,000 alumni, who have graduated over the past century and a quarter.

President: One of the alumni just referred to is Edward Mills Purcell, who was marked as the Outstanding Freshman in 1929 by Beta Chapter of Eta Kappa Nu, and who subsequently went on to win the Nobel Prize in Physics for his discoveries related to nuclear magnetic resonance, and is additionally recognized as having launched the field of radio astronomy. Our Corresponding Secretary will now speak for Dr. Purcell in providing a brief history of Beta Chapter.

Corresponding Secretary (on behalf of Purcell): Beta Chapter was formed in 1906, the first extension of Maurice Carr’s vision beyond its original campus. Due to prevailing attitudes on the
Purdue campus about secret societies, Beta Chapter became inactive shortly thereafter, but was reinvigorated in 1911, and has remained a vital element of the electrical and computer engineering community at Purdue University ever since. <More goes here about size, success of chapter, prominence of national role, etc.>

END OPTIONAL TEXT]

President: Candidates please stand, turn on a light so that we can see you just as you see us, and remain standing.

(All room lights are turned ON at this point.)

You have heard the three central ideals associated with a successful member of IEEE-Eta Kappa Nu. You have demonstrated all three of these qualities: SCHOLARSHIP, CHARACTER, and ATTITUDE.

I now ask you to promise that, to the best of your ability, you will:

- Continue to develop your intelligence and common sense in college and in your practice as a professional.
- Continue to develop your character in positive ways: always practice honesty and ethical behavior; develop good judgment; always work hard, and never take the path of least resistance.
- Continue to develop your positive attitude about life, always be congenial, tolerant, tactful, and respectful.

As I ask each of you to promise these things, please unmute to answer. If you do promise, raise your right hand and answer “I do”, and mute yourself afterward.

Do you <first candidate’s full name> promise these things?

(Candidate answers, "I do", and President repeats the question for each inductee.)

Now that you have signified your willingness to foster our three central ideals, I will administer the binding pledge that is required of every member of IEEE-Eta Kappa Nu. (The candidates remain standing). Please unmute yourself, hold up your right hand, and repeat after me:

"I sincerely promise that I will live up to . . . in word and in deed . . . the principles for which
IEEE-Eta Kappa Nu stands. . . To the members now and to those to come after . . . I bind myself to the faithful observance of these promises. . . I give my solemn word of honor."

Please mute yourself, and be seated.

(Pause for all to be seated.)

In a traditional induction ceremony, I would now ask our Vice President to conduct each candidate before me to sign our membership book and to deliver the symbols of membership. Instead, I now ask each candidate to sign the IEEE-Eta Kappa Nu Signature Form. (Pause for a moment to allow candidates to sign). At the conclusion of this ceremony, please email your signed form to me. We will print your signature and affix it to our membership book. Should you be on campus next term, I’d ask that you reach out such that we can replace the printed version of your signature with a direct signature in our book. I now ask that, as you have all signed the signature form, our Vice-President arrange for you to receive the symbols of membership – [our emblem the Wheatstone bridge, and] the sealed certificate of membership. If you will be on campus next term, we can arrange to meet in person. Otherwise, we will coordinate to mail these important items to you. I now officially extend to each of them the right hand of fellowship and declare you a fully inducted member of IEEE-Eta Kappa Nu. Please virtually shake my hand now.

By virtue of the authority vested in me as President of the <Name of Chapter> Chapter of IEEE-Eta Kappa Nu, I declare you duly inducted members of our organization. In token of your membership I have placed in your hand a certificate that bears the seal of IEEE-Eta Kappa Nu and the signatures of the proper officers testifying to your induction into this society.

Members of IEEE-Eta Kappa Nu remember well what has transpired here this <fill in as appropriate – morning, afternoon or evening> and see that it is faithfully transmitted to future generations of members at <Name of Chapter> Chapter.

I shall now introduce this initiation team and thank them for this service to the inductees and the society as a whole.

(The President introduces the chapter officers involved in initiation and their officer positions. The President then introduces any honored IEEE-HKN members and other dignitaries who may be present.)
We welcome you into IEEE-Eta Kappa Nu. This <Date Month Year> Induction meeting of <Name of Chapter> Chapter of IEEE-Eta Kappa Nu is now adjourned. I thank all of you for your participation in this ceremony. All members present would shake the hand and congratulate each new member were this ceremony held in person. In lieu of that, will all members present please take a moment to join me in welcoming our new members.

(Old members present each say a brief word of greeting to the entire class.)

**OPTIONAL:**

**President:** This concludes our formal induction ceremony. The {CHAPTER NAME} chapter invites all present to remain connected and to participate in our virtual activity. While you are free to disconnect at this time, I’d encourage you to remain. In the normal course of affairs, we would host a {Banquet, social activity, seminar} following our induction. As that is not feasible, we will now { hear from IEEE-HKN Board member {NAME}, Play a virtual game of pictionary and get to know one another better, hear from Prof. {NAME} who will speak about {TOPIC}.}
IEEE-Eta Kappa Nu

(REMOTE) INDUCTION RITUAL
Pictionary Activity Appendix
Remote Operations Version: 2020.1

1. Each player writes a sentence about themselves, their experience during the induction, or their lives in general.
2. Each player then sends their sentence to another player. Each player draws a representation of what their received sentence describes. For example, if someone received a sentence “I wish I could go to the beach” a sketch of a person thinking of a beach could be drawn.
3. One minute after receiving another player’s initial sentence, the players should send their sketch to the next player. Upon receiving a sketch, a player may not look back at the previous sentence used to generate the sketch but instead must try to guess what the sentence may be. The player should write their guess and send it to the next player.
4. Play continues until each player has added to each pictionary story of sentences and sketches. If there are 5 players in a breakout room, each story should contain 3 sentences and 2 sketches.
5. Each player should tell their story by reciting the initial sentence, showing the subsequent drawing, and continuing to show sentences and drawings until all in the chain have been exhausted. The next player in line should do likewise until all stories have been shared.
6. The group should select the best (most creative, funny, odd, etc) story to share with the full chapter.
7. At the conclusion of the breakout time (~ 15 minutes), the chapter should reconvene and each group should share its best story.
8. Sharing of these stories should be an enjoyable activity and will likely induce some laughter. Encourage chapter members to ask questions of the authors / artists.