Each season, FIRST Robotics Competition teams receive Kits of Parts (KoP). The KoP is not designed to be a "bolt together" solution to play the game, but is a starting point, containing mostly donated components from Suppliers across multiple industries. For technical information about some of those components, visit the Screensteps repository.

FIRST Robotics Competition Suppliers are an incredibly supportive group who are proud to be involved in the hardest fun you'll ever have! Be sure to thank them when you see them at our events!

Please note, the information on this page is staged for the upcoming 2020 INFINITE RECHARGE℠ season. Archived Kit of Parts information from the DESTINATION: DEEP SPACE Powered by The Boeing Company season is here.

The KoP System consists of three parts, available to teams through a variety of sources.

| Kickoff Kit | FIRST Choice | Virtual Kit |

**Kickoff Kit** – a box of parts delivered to teams at the start of the season

**FIRST Choice** - items available via an online menu in exchange for credits issued to all teams

**Virtual Kit** – products available directly from the Supplier either via download or custom order
## Kit of Parts Timeline: 2020 Season

<table>
<thead>
<tr>
<th>Year</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>Kickoff Kit: Delivery</td>
<td>Kickoff Kit: Missing/Damaged Part Reporting (1/4-10)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Key KOP Deadlines

All deadlines are noon, Eastern.

- **Kickoff Kit**: Drive Base Opt-Out Deadline | Oct. 8, 2019 | Add to Calendar
- **Virtual Kit**: Pre-Kickoff Voucher Release | Nov. 14, 2019 | Add to Calendar
- **FIRST Choice**: Round 1 Priority Lists Locked | Dec. 4, 2019 | Add to Calendar
- **FIRST Choice**: Round 2 Priority Lists Locked | Jan. 9, 2020 | Add to Calendar
- **Kickoff Kit**: Replacement Parts Requests Due | Jan. 10, 2020 | Add to Calendar
- **FIRST Choice**: Closed | Apr. 10, 2020 | Add to Calendar
Kickoff Kit Detail

A box of parts delivered to teams at the start of the season...

The Kickoff Kit consists of items that we pack in totes (mostly in totes, there are typically exceptions for late or big items) and distributed to teams on Kickoff at local Kickoff sites (or for those teams that don't make it to a Kickoff, shipped directly to the team at the team's expense, aka MySite shipping).

There are two permutations of this: one set of items that go to all teams and a second set of items that goes to 1st year, aka “rookie,” teams.

Drive Base Opt Out

"Event ready" veteran teams are invited to opt-out of the Kickoff Kits' drive base kit and instead receive a voucher to AndyMark. Information is in this FRC blog, instructions are here, and the deadline is Oct. 8, 2019.
Kickoff Kit: Size & Weight

- All teams receive a Black Tote (~12 in. x 27 in. x 17 in., ~46 lbs.) and a set of separate items (48 in. long, ~6 lbs.).
- New (“rookie”) teams also receive a Gray Tote (~12 in. x 27 in. x 17 in., ~49 lbs.).
- Teams that did not opt out (described above) also receive a Drive Base Kit (~7 in. x 7 in. x 33 in., ~29 lbs.).

Checklists

*(files may download automatically, currently encrypted)*

- Black Tote *(V1, updated 1/10/20)*
- Gray Tote
- Drive Base Kit
- Separate Items

Missing or Damaged Kickoff Kit Items

We strongly recommend that one of the first things you do after Kickoff is to inventory your Kickoff Kit. If anything is missing or damaged 1) we’re so sorry! and 2) you need to let us know and we’ll make it right.

The process we use to get information from you is built in to the registration system and available from noon (Eastern) on Jan. 4, 2020 to noon (Eastern) on Jan. 10, 2020.

Please know and understand that we will not process requests that don’t use this system for teams who received their Kickoff Kits on or before Jan. 9, 2020. (If you’re a “MySite” team who received your kit after Jan. 9, 2020, please email us within 2 business days of receipt of your Kickoff Kit with any missing/damaged items.)

To report anything missing or damaged:

1. Your Lead Coach/Mentor 1 or 2 logs in to your team’s account.
2. Click on the “Payments and Product” drop down menu and select “Order Replacement Parts”
3. Enter the shipping information for where you’d like the replacement parts sent.
4. Use the “Subkit Container” filter to navigate to the parts you need to report.
5. Click the “Add” button for the item that’s missing/damaged.
6. Specify the quantity missing/damaged, include an explanation, and click “Save.” The list will auto save when you add an item, so you can come back to it later.
7. Once your list is complete, hit “Submit Request.” You can only submit once, and you must Submit before noon (Eastern), Jan. 10, 2020 for your request to be processed. *(date corrected 1/6/20)*
**FIRST Choice Detail**

*Items available via an online menu in exchange for credits issued to all teams...*

Teams get items from **FIRST Choice** using either the Priority List system in Rounds 1 and 2 or via a traditional "open" ordering process.

Key dates are [listed in the timeline above](#) and embedded in the flowchart below.
Priority Lists

FIRST and AndyMark use a priority list system, similar to the event preferencing system, to invite teams to indicate what they'd like and distribute items in a way that doesn't result in a mad cyber rush to get to high value inventory that a typical first-come, first-serve model does.

Here's how it works:

1. **Each team makes a list & updates shipping detail.** A team creates a Priority List (a prioritized list of FIRST Choice items that a team would like) in their FIRST Choice
account, and the lists are locked at a specific time/date (see timeline above). Shipping charges will apply (details to be posted on the FIRST Choice site before Priority Lists are locked), and a billing address, a shipping address, and credit card information must be provided before creating your Priority List. Additional charges may apply for international teams, for which the team is responsible, and AndyMark will address on a case by case basis.

- Login information for the FIRST Choice site will be posted in each team’s registration account when Round 1 opens and will be viewable by lead mentors 1 and 2.
- Only event-registered or secured FIRST Robotics Competition teams will have access to their login information, and thus only event-registered teams will be able to create and submit a Priority List.
- Priority Lists will be created using (and only accepted via) the Priority List feature on the FIRST Choice site.
- Priority Lists are saved each time the user clicks “Update,” letting teams add, subtract, and re-prioritize items until the deadline.
- Upon the deadline, any existing Priority Lists are locked, processed, and no additional changes may be made (we strongly encourage you complete your list at least a day before the due date to avoid unexpected delays or surprises).
- If you feel overwhelmed by the options, there are sample lists like “pneumatics” or “vision” available for quick selection. You can select a sample list for your priority list – or use it to get started and edit/customize as you see fit. Caution though, when you select one it will wipe an existing list and start fresh.
- Any priority list submitted by a team that has not secured first-event registration payment with FIRST by noon (eastern time), Dec. 4, 2020 will be discarded before lists are ported in to the auto draft system (please anticipate at least one business day for registration payment to be processed and the updated status to be relayed to AndyMark).

2. AndyMark randomly ranks lists. After lists are locked, each list with at least one item is assigned a random rank (the order in which individual teams complete their Priority Lists before the deadline does not affect their rank).

3. Items are assigned. In rank order, AndyMark’s auto draft system queries the team’s highest priority item and, provided the team has the credits and FIRST Choice has the inventory, issue the item to the team. This applies to each Priority List line item as ranked. If the team doesn't have enough Credits to cover the entire amount (but at least one) or FIRST Choice inventory doesn’t have the entire quantity (but at least one), the team will get as many as their credits/FIRST Choice inventory allow. If credits or inventory can’t cover one, it will move on to the next ranked item so the team is not skipped for that round. Once the draft system gets to the last ranked Priority List, the draft system will query that last Priority List’s next item and work its way back up the ranks (for Teams that know how we’ve done Alliance Selection in the past, this serpentine process probably seems familiar). This draft continues until inventory’s gone or Priority Lists are exhausted. Inventory is then updated for the next phase of FIRST Choice. We will not publicly publish teams’ Priority Lists, the assigned rankings, or final order contents.

4. AndyMark ships your order!
Open Ordering

The open ordering phase of FIRST Choice is a traditional first-come, first-serve ordering process. Teams add items to their carts and check-out using credits remaining after the priority list phases.

Still not sure how this all looks? Hopefully How to FIRST Choice can help...
Virtual Kit Detail

Products available directly from the Supplier either via download or direct order...

Items added at Kickoff indicated with *

Product Donation Vouchers
<table>
<thead>
<tr>
<th>Thank you...</th>
<th>for...</th>
<th>which expires on...</th>
<th>Drive Train</th>
<th>Control System</th>
<th>Electrical Supplies</th>
<th>Pneumatics</th>
<th>Sensors</th>
<th>Shop Materials/Tools</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AndyMark</strong></td>
<td>$450.00</td>
<td>4/15/20</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>Armabot</strong></td>
<td>RS7 encoder</td>
<td>4/26/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>Automation Direct</strong></td>
<td>$35.00</td>
<td>10/3/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>Clippard</strong></td>
<td>$20.00</td>
<td>4/30/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>Digi-Key Electronics</strong></td>
<td>$50.00</td>
<td>9/30/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>Inventables</strong></td>
<td>$100.00</td>
<td>6/3/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>Next Gen Robots</strong>*</td>
<td>Motor Heatsink</td>
<td>5/31/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
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<tr>
<td><strong>REV Robotics</strong></td>
<td>$50.00</td>
<td>6/30/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>RoboPromo</strong>*</td>
<td>Iron-on FIRST logos</td>
<td>5/1/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>Swyft Robotics</strong></td>
<td>10 x ½ in. Hex Bearings</td>
<td>4/30/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
</tr>
<tr>
<td><strong>TE Connectivity</strong></td>
<td>$25.00</td>
<td>6/1/20</td>
<td>Add to Calendar</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
<td>♦</td>
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## Software

<table>
<thead>
<tr>
<th></th>
<th>Consider using for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altium</td>
<td>Animation, CAM, Certification, Cloud Computing, Data Analysis, Programming, Simulation, Other</td>
</tr>
<tr>
<td>Altium Designer</td>
<td>12/31/20 Add to Calendar</td>
</tr>
<tr>
<td>$75/student in AWS credits</td>
<td>11/15/20 Add to Calendar</td>
</tr>
<tr>
<td>AWS Educate Learning Content</td>
<td>11/15/20 Add to Calendar</td>
</tr>
<tr>
<td>Autodesk Software Access</td>
<td>n/a</td>
</tr>
<tr>
<td>DriveWorks Solo</td>
<td>9/30/20 Add to Calendar</td>
</tr>
</tbody>
</table>

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**Thank you... for... which expires on...**

- **Vulcan Spring**: 6 constant force springs 12/31/20 Add to Calendar
- **Altium Designer**: 12/31/20
- **AWS**: $75/student in AWS credits 11/15/20
- **AWS Educate Learning Content**: 11/15/20
- **Autodesk Software Access**: n/a
- **DriveWorks Solo**: 9/30/20

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**Vulcan Spring**: 6 constant force springs

**AWS**: $75/student in AWS credits

**Altium Designer**: 12/31/20

**AWS Educate Learning Content**: 11/15/20

**Autodesk Software Access**: n/a

**DriveWorks Solo**: 9/30/20
<table>
<thead>
<tr>
<th>Package</th>
<th>Description</th>
<th>Start Date</th>
<th>End Date</th>
<th>License Type</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Mastercam</td>
<td>Educational Suite</td>
<td>10/31/20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NI</td>
<td>LabVIEW W + Add-Ons</td>
<td>1/15/20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTC</td>
<td>PTC Software</td>
<td>9/12/20</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Siemens</td>
<td>SolidEdge (student edition)</td>
<td>11/27/20</td>
<td></td>
<td></td>
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<tr>
<td>Siemens</td>
<td>Certification Exam</td>
<td>11/27/20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siemens</td>
<td>Individual Annual Membership</td>
<td>11/14/20</td>
<td></td>
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<tr>
<td>SOLIDWORKS</td>
<td>3D Design Software Suite</td>
<td>6/1/20</td>
<td>7/31/20</td>
<td>(edited 8/13/20)</td>
<td></td>
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<tr>
<td>Tableau</td>
<td>Data Analysis</td>
<td>4/30/20</td>
<td></td>
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<tr>
<td>Wolfram*</td>
<td>Computation Software</td>
<td>6/1/20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Virtual Kit Item Details**
Altium

What: One-year Altium Designer student license

- Altium Designer is a PCB development platform with tools to bring a PCB design from concept to manufacturing
- License to be shared among up to five students

Expires: 12/31/20
Access Codes: n/a
To Access: Go to Altium's FRC page and fill out the form.

Amazon Web Services

What: $75 per student in Promotional Credits for cloud computing & AWS Educate Learning Content

- AWS Promotional Credits provide access to:
  - AWS Educate's cloud career pathways, with 30+ hours of content, assessments, and projects personalized to your chosen cloud career path, like Solutions Architect, Data Scientist, and Software Developer.
  - Specialty Badges in specializations like AWS RoboMaker, Amazon Alexa, AWS for Gaming and more.
  - a Machine Learning Classroom where you can learn how to use Amazon AI/ML.
  - micro-credentials like AWS Educate Certificates of Completion and AWS Educate Badges
  - AWS Technical Essentials online training course
- AWS Educate is Amazon’s global initiative to provide educators and students resources for building skills in cloud technology at no-cost. With a focus on real-world, applied learning experiences, AWS Educate offers students and educators access to self-paced content that introduces cloud computing and lets them build on real-world technologies such as artificial intelligence, gaming, IoT, and more.

Expires: 11/15/20
Access Codes: Available to Lead Mentors 1 & 2 in the team's registration account

To Access:
- Mentors, please reference the Mentor Onboarding Guide (updated 1/4/20). We encourage mentors to register first and then invite their students via the AWS Educate Classroom.
- Students, please reference the Student Onboarding Guide (updated 1/4/20).
- When applying, please be sure to select “FIRST” as your institution.
- The application review process can take up to 48 hours, so make sure you register ahead of time.
- Need help? Contact AWS Educate Support.

AndyMark

What: $450.00 at AndyMark.com (for veteran teams who opted out of the drive base kit)
Expires: 4/15/20
Access Codes: Available to Lead Mentors 1 & 2 in the team's registration account
To Access: Upon checkout at AndyMark.com, enter your team's code at the payment step of checkout, look for PDV. Any order more than $450 will be the responsibility of the customer and will need to be paid to AndyMark through normal order purchasing methods.

Armabot

What: One (1) RS7 Encoder (shipping not included)
- Valid for purchase of one RS7 encoder individually or a multiple product order that includes one RS7 encoder. Limit one per FIRST® Robotics Competition team.
- Must be registered for the 2020 robotics season.
- Voucher not transferable to other people or teams.
Expires: 4/26/20
Access Codes: Available to Lead Mentors 1 & 2 in the team's registration account
To Access:

1. Go to www.armabot.com
2. Select 1 or more RS7 encoders (first unit free with this voucher)
3. Enter your valid code from the FIRST® team registration system
4. Enter shipping and billing information
5. Place order and wait for arrival (3-5 days in continental USA)
6. Installation instructions at www.armabot.com
7. Technology tutorial for encoder implementation at www.armabot.com

Autodesk

What: 3D Design Software Access

- Autodesk® Fusion 360® – This 3D CAD/CAM tool for PC and Mac enables robot designs, assemblies, photorealistic renderings, fabrication, and team collaboration.
- Autodesk® Inventor® – With this professional software, teams can produce 3D models that help with the design and visualization of the robot.
- Synthesis: An Autodesk® Technology – Features virtual practice fields to test your robot CAD models for driver practice, code emulation, strategy and more with this robotics simulator.
- Autodesk® EAGLE™ – Bring your next spark of an idea to life with powerful PCB design software made for every engineer.
- Autodesk® Tinkercad® – Use Tinkercad Circuits environment to program and simulate an Arduino board for use on your robot.
- Autodesk® 3ds Max® – With modeling, rendering, and animation capabilities, 3ds Max enables animation capabilities.

Expires: n/a
Access Codes: n/a
To Access: Visit Autodesk’s dedicated page for everything FIRST Robotics Competition including CAD data sets of the Kit of Parts and playing field, Tutorials, and access to Autodesk software.

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AutomationDirect.com

**What:** $35.00 at AutomationDirect.com (shipping not included)
**Expires:** 5/4/20
**Access Codes:** Available to Lead Mentors 1 & 2 in the team's registration account
**To Access:** IMPORTANT INSTRUCTIONS - We cannot apply the discount AFTER you place an order!

1. Obtain your voucher code from your team's *FIRST* registration account
2. Login OR create a new account here.
3. Then visit the our FRC page to enter your voucher code. This will enable a one-time $35 credit for your account.

Some Restrictions Apply:

- Orders must be placed online. No ‘call-in’ orders.
- Stock items ordered by 6:00pm EST will ship the same day.
- Orders must ship to a US or Canadian address.
- Credit card billing address must also be US or Canadian.
- The voucher cannot be used towards shipping fees.
- Orders under $49 are shipped via 2-day service to US addresses for a flat rate of $10 (a credit card will be required to pay for shipping).
- Orders to Canada will incur brokerage fees.
- Larger orders may qualify for FREE two-day shipping see this site for details.
- This voucher cannot be used to pay sales tax. A credit card (or PayPal) will be required to pay any applicable taxes. If your team/organization is tax exempt, you can submit appropriate documentation online during checkout.

Clippard

**What:** $20.00 at Clippard.com
**Expires:** 4/30/20
**Access Codes:** Available to Lead Mentors 1 & 2 in the team's registration account and the 2020 Virtual Kit Catalog in your Kickoff Kit
**To Access:**

- Simply visit Clippard.com to select your products.
- PLEASE NOTE: You must create an account AND be logged in for the voucher to be validated.
Digi-Key Electronics

**What:** $50.00 of components from [Digi-Key's webpage](https://www.digikey.com)

- Good for a one time use. Any amount not utilized in your initial transaction will be forfeited.
- Taxes not included.

**Expires:** 9/30/20

**Access Codes:** n/a

**To Access:**

- Go to [Digi-Key’s FIRST webpage](https://www.firstinspires.com)
- Click on the $50 Product Voucher
- Enter your team information
- Create your order
- The voucher will not display on the total of your order, but will be subtracted from your order during processing.
- Good for purchase of components at [www.digikey.com](https://www.digikey.com)

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DriveWorks Ltd

**What:** One (1) year license of DriveWorks Solo Design Automation Software

- DriveWorks Solo allows engineers and students to quickly and easily create and configure variations of your SOLIDWORKS models directly inside of SOLIDWORKS.

**Benefits of DriveWorks Solo include:**

- Capture and re-use your design knowledge
- Incorporate design rules to reduce errors and rework, and improve product quality
- Automate repetitive tasks to reduce design time
- Liberate students and mentors to focus on quality variations of robot design.
• DriveWorks Solo is a powerful SOLIDWORKS Automation Tool. It allows teams to automate their SOLIDWORKS parts, assemblies and detailed drawings.
  o Control Dimensions, features, custom properties, advanced feature parameters, instances and file formats.
  o Dynamically replace components.
  o Create a library of components using intelligent file reuse.
• Valid for one (1) license of DriveWorks Solo requested by the Team Leader.
• License includes access to online learning resources which include DriveWorks Solo Online Training webinars, How to Videos, Help Files and other learning resources.
• Product support and assistance provided to Team Leader by DriveWorks Ltd. via email to first@driveworks.so.uk.
• Must be registered for the 2020 season.
• License is non-transferable to another team.

Expires: 9/30/20
Access Codes: n/a
To Access:

• Visit DriveWorks' dedicated FIRST webpage to submit your request for a license of DriveWorks Solo.
• Once on the website, you will be asked to complete and submit a "Request a License" form. Upon submittal of this form, we will review and process accordingly.
• Once approved, you will receive detailed instructions on how to download and install the software.
• For questions, email DriveWorks.

Inventables

What: $100.00 at Inventables.com (shipping not included)
Expires: 6/30/20
Access Codes: Available to Lead Mentors 1 & 2 in the team's registration account
To Access:

1. Retrieve your team's voucher code from the FIRST system
2. Add the desired items from our store to your cart.
3. Use the voucher code in the "Enter Promotion" field on the shopping cart page.
4. Check out as normal.
Mastercam

**What:** One free license of the Mastercam 2020 Educational Suite. It includes your choice of Mastercam or Mastercam for SOLIDWORKS.

- Mastercam is a CAD/CAM software that can be used to both design products and program the processes to manufacture parts, specifically on CNC machines. Mastercam generates toolpaths that drive machine tools to turn designs into physical parts.

**Expires:** 10/31/20

**Access Codes:** n/a

**To Access:** Please fill out the required information on this registration page. Once we receive your request, an email will be sent with your activation code and instructions on downloading Mastercam.

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NI

**What:** LabVIEW Software

- This license also provides access to more than a dozen LabVIEW add-ons, NI Multisim for SPICE simulations, and NI Ultiboard for PCB design.

**Expires:** 1/15/21

**Access Codes:** Available to Lead Mentors 1 & 2 in the team's registration account

**To Access:**

1. Access your team’s serial number - have your Lead Mentor 1 or 2 log in to your team’s account from the FIRST website to access your serial number by clicking on "Passwords/Voucher Codes."
3. Learn and Earn - learn LabVIEW with free online training and earn skills badges at our dedicated FRC page.
Next Gen Robots

What: CIM Cooler 180 or 775 Cooler 360  
Expires: 5/31/20  
Access Codes: n/a  
To Access: Start at the Next Gen Robot website, add the preferred item to your cart, and apply your coupon code at checkout. Voucher can be redeemed for one CIM Cooler 180 (an $8.00 value) or one 775 Cooler 360 (an $8.00 value), but products can be purchased in any combination and multiple amounts of the CIM or 775 Coolers. After applying the coupon code during checkout, the total will be less $8.00.

1. Be sure to email email us with your Lead Mentor name, team number, and code found in the Team Registration System so that we can make sure that your code is active!
2. Once confirmed, enter the code from step 1 into "Coupon code" on your order and the discount will appear during checkout. Do not "Checkout as guest."
3. Before submitting the order, make sure the discount has been applied to the total. If the discount is not showing, try clicking "view cart" and reapply the code.

PTC

What: PTC resources for FIRST teams  

- PTC Creo - Industry standard 3D CAD software  
- Vuforia - Program your robot to identify images and objects in the 3D environment  
- Creo 3D models for kit of parts and playing field  
- AR playing field with Vuforia View  
- PTC FIRST team grants  

Expires: 9/12/20  
Access Codes: n/a  
To Access:  

- Visit the FIRST | PTC webpage for more information.  
- Email comments or questions.
REV Robotics

**What:** $50.00 at [REVRobotics.com](http://REVRobotics.com) (shipping not included)

**Expires:** 6/30/20

**Access Codes:** Available to Lead Mentors 1 & 2 in the team's registration account

**To Access:** Enter the code you receive as a "Coupon/Gift Certificate" during the checkout process. More instructions will be posted on our FRC Voucher page.

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RoboPromo

**What:** Iron-on FIRST logos for bumpers (set of 8, shipping not included)

**Expires:** 5/1/20

**Access Codes:** Available to Lead Mentors 1 & 2 in the team's registration account

**To Access:** Enter the code at [www.robopromo.com](http://www.robopromo.com).

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Siemens

**What:**

- Academic License for SolidEdge 3D CAD Software & Certification Exam for each team member
- Solid Edge certification exam (for FIRST team members, Siemens will waive the usual $25.00 fee)
- [CAD File Sharing & Collaboration Portal](http://CAD File Sharing & Collaboration Portal) to view and share all types of CAD file formats, and experience true-to-scale 3D models in real-world settings via augmented reality.

**Expires:** 11/27/20
Access Codes: Available to Lead Mentors 1 & 2 in the team’s registration account and the 2020 Virtual Kit Catalog in your Kickoff Kit

To Access:

- You can download the software at your convenience from Siemens’ dedicated FIRST page.
- For the certification exam, visit Siemens' certification page and enter the access code.
- For Kickoff Kit parts modeled in Solid Edge, click here.

SolidProfessor

What: One (1) free individual annual membership to SolidProfessor

- With this voucher, your team will receive one free individual annual membership to SolidProfessor, giving you access to SolidProfessor’s online CAD and CAM training to help your team become more efficient designers. The training is organized into short, bite-sized videos that make learning CAD and CAM easier than ever. You can follow the full courses or search through the SolidProfessor Library of videos to find the help you need. You also can access SolidProfessor’s cert prep training so you can ace your next certification exam.

Expires: 11/14/20

Access Codes: n/a

To Access:

1. Visit the SolidProfessor FIRST Robotics web page and fill out the short form.
2. Within a week, a SolidProfessor team member will set up your free membership and reach out to you at the email address provided with information about how to access your account.
What: SOLIDWORKS 3D Design Software Suite

- SOLIDWORKS Premium
- SOLIDWORKS Simulation Premium
- SOLIDWORKS Flow Simulation, Electronics Cooling Module and HVAC module
- SOLIDWORKS Motion
- SOLIDWORKS Plastics
- SOLIDWORKS Sustainability
- SOLIDWORKS Electrical Professional
- SOLIDWORKS PCB
- SOLIDWORKS CAM Professional
- SOLIDWORKS Model Based Definition
- SOLIDWORKS Visualize Professional, Visualize Boost
- MySolidWorks for Students

Expires: 6/1/20 7/31/21 (edited 8/13/20)

Access Codes: n/a

To Access: Interested student teams should complete our online application at our FIRST specific page.

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Swyft Robotics

What: Ten (10) ½ in. hex bearings (shipping not included)

- Order must be shipped to a US address
- Credit card must be issued by a US or Canadian bank.
- Limit one per FIRST® Robotics Competition Team.
- Must be registered for the 2020 robotics season.
- Voucher not transferable to other people or teams.

Expires: 4/30/20

Access Codes: Available to Lead Mentors 1 & 2 in the team's registration account

To Access:

1. Go to our FIRST voucher page
2. Enter your valid code from the FIRST® team registration system
3. Enter shipping and billing information
4. Place the order and wait for the arrival
Tableau

**What:** One (1) copy of Tableau Desktop, five (5) activations per team (for educational use only)

- data analysis
- visualization
- Tableau Prep for data preparation

**Expires:** 4/30/20  
**Access Codes:** Available to Lead Mentors 1 & 2 in the team's registration account (please don't share your key with anyone outside your team)  
**To Access:** Visit our *FIRST specific* page to get started.

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TE Connectivity

**What:** $25.00 at TE.com  
**Expires:** 6/1/20  
**Access Codes:** n/a  
**To Access:** Visit our *FIRST specific* page to get started.

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Vulcan Spring

**What:** 6 springs from a select list (includes shipping w/in the US and Canada)  
**Expires:** 12/31/20  
**Access Codes:** provided in the Vulcan Spring packet in the Kickoff Kit's Black Tote  
**To Access:** Visit [www.vulcancares.com](http://www.vulcancares.com) to get started. Orders limited to one per team per year.
Wolfram Research

**What:** One year of WolframOne, WolframSystemModeler, and WolframAlpha Pro

**Expires:** 6/1/20

**Access Codes:** Available to Lead Mentors 1 & 2 in the team's registration account

**To Access:** Visit [www.wolfram.com/firstrobotics/](http://www.wolfram.com/firstrobotics/) to get started.