

Gordon A. Cain Center

for Scientific, Technological, Engineering & Mathematical Literacy Data and Technology Education Across all Disciplines

Middle School STEM Modules

1. Materials

Internet access, one-to-one computer or tablet for use daily, and access to the LSU/BRBytes servers.

Reusable Hardware/Material for 1 class in each grade 6-8	Recommended Unit	Cost/Unit
Various reusable material and hardware for projects	1 per Classroom	\$1000
Consumables 6-8		
Various consumables for projects	1 per Classroom	\$500
Software 6-8		
	1 per Classroom	\$0

^{*}Complete supply list can be found here

2. Required software, networking access, and access to LSU/BRBytes servers

- Teachers will need to be able to access the LSU/BRBytes servers using several Internet protocols including but not limited to HTTPS and SSH.
- Students and teachers will access the curriculum and teaching materials through the LSU and BRBytes servers, and through Google Drive.
- Teachers will need to share student data with their designated LSU Pathway Point-of-Contact.
- Principals will need to communicate with the district's information technology department to ensure that there are no technological restrictions that block access to the LSU/BRBytes servers in the lsu.edu, brbytes.org or lsupathways.org domains on any port.

3. Required teacher collaborations

Teachers will communicate with LSU instructors via emails, apps hosted on the LSU/BRBytes servers, and the band.us app.

4. Required administration of course content, pre/post test, and research instruments
All required materials and instruments will be either posted in the LSU/BRBytes servers or their location announced via email with the teacher/instructor group for this course.

5. Course Work

Teachers must present the course material in sequence or as approved by collaboration with the LSU Pathway Point-of-Contact. In the fall semester, teachers will report post-test results for each unit to the Point-of-Contact, if applicable. In the spring semester, the teacher is responsible for utilizing the LSU/BRBytes servers based system to release, acknowledge, provide student feedback, and grade student work. The LSU/BRBytes servers will track and notify the teacher as students near the required 75% attainment mark for certification.

6. Other

As this is a project-based learning class, we strongly suggest that each section of the course be limited to a *maximum* of 25 students. The course is dependent on the teacher providing feedback and reviewing student code. The course requires that teachers have adequate time to interact with each student.