Lithia Springs High School is home to Douglas County's Science, Technology, Engineering, and Mathematics (STEM) Magnet program. Use of Project Lead the Way's (PLTW) specialized curriculum in Biomedical Science, Computer Science, and Engineering distinguishes the STEM Magnet program from all other STEM pathways offered in DCSS. Three separate agencies, each with its own rigorous and comprehensive certification process, have recognized the quality and value of the LSHS STEM program: the Georgia Department of Education (2016), Cognia Accreditation, formally AdvancED (2017), and the National Institute for STEM Education (2019).

With personalized learning opportunities, STEM students are empowered to work collaboratively on complex, open-ended tasks. Through an inquiry-based approach for building knowledge and blended-learning experiences, instructors develop a more inclusive, interactive and creative approach to teaching. As a result, students develop self-confidence, independence, and pride in their accomplishments as they use newly-acquired content knowledge to explore, design, test, modify, and solve problems which exist in the real world.

Graduates of the STEM program satisfy a diverse array of rigorous expectations, including AP and Dual Enrollment courses, to develop a comprehensive portfolio and résumé for their post-secondary endeavors.

Admissions Process
Potential STEM students may apply for admission to the LSHS STEM Magnet program during the fall of their 8th grade year. Under special circumstances, students may apply for the magnet program while in the 9th grade.

LSHS Magnet students are selected based on a comprehensive review of the following criteria: middle school grades, discipline and attendance records, teacher recommendations, standardized test scores, and application responses.

The STEM application is available online at https://www.lshsstem.com/admissions.html

Magnet Program Application Timeline
Information Meeting & Open House: October 30, 2019, 5:30 pm
Information Meeting & Application Workshop: November 19, 2019, 6:00 pm
Applications Due: December 16, 2019
Interviews: Conducted January, 2019
Student Notifications Mailed: February 5, 2020
Commitment Letters Due: February 14, 2020

STEM Pathway Courses
In addition to the following STEM pathway courses, students take a variety of honors, AP, and dual enrollment courses.

Biomedical Science
Introduction to Healthcare Science
PLTW Principles of Biomedical Science (Honors Forensic Science)
PLTW Human Body Systems (Honors Anatomy & Physiology) with embedded Essentials of Healthcare Science
PLTW Medical Interventions (Honors Epidemiology)
PLTW Biomedical Innovations (Advanced Scientific Research) Sports Medicine (optional)
Emergency Medical Responded (optional)

Computer Science
PLTW Computer Science Essentials
PLTW AP Computer Science Principles
PLTW AP Computer Science A Introduction to Cybersecurity
PLTW Advanced Cybersecurity

Engineering
PLTW Introduction to Engineering Design
PLTW Principles of Engineering
PLTW Computer Integrated Manufacturing Post-AP Physics and Robotics
In 2016, the Georgia Department of Education awarded LSHS State STEM Certification.

In 2017, LSHS earned the AdvancED STEM Certification.

In 2019, the National Institute for STEM Education awarded LSHS the National Certificate for STEM Excellence, making LSHS the only high school in the state of Georgia with three STEM certifications.

In 2019, the National Institute of STEM Education awarded 7 LSHS teachers the National Certificate for STEM Teaching.

During the 2018-2019 school year, the STEM program was awarded over $70,000 in grants to support technology upgrades, professional development, and student research initiatives.

LSHS STEM students have completed internships with Georgia Tech, Emory University, Alum-a-Lift, Douglasville Wellness and Chiropractic Center, Terry Miller Architecture, Buckhead Family Dentistry, Zoo Atlanta, the Georgia Aquarium, and many more industry and community leaders.

Due to a partnership with PLTW, LSHS engineering students are eligible for exclusive paid internships with Lockheed Martin.

STEM students represent LSHS in a variety of prestigious national programs, including: the Hugh O’Brien Leadership Conference, the United States Senate Youth Program, the Georgia Civic Awareness Program, Douglas Youth Leadership, and as Career and Technical Education Presidential Scholar Finalists, and STAR students.

30 LSHS STEM students participated in the 2019 DCSS Science and Engineering Fair, earning 83% of all 1st and 2nd place ribbons (including Best in Show).

80% of 2019 LSHS STEM Region 6-5A Science & Engineering Fair entries earned 1st or 2nd place recognition, with 4 projects earning bids to state.

Since 2014, all four of the DCSS GHP representatives for Engineering attended LSHS.

STEM graduates attend top colleges and universities, including: Georgia Tech, University of Georgia, Kennesaw State University, SCAD, Davidson, Princeton, and Washington & Lee.

Three LSHS STEM graduates earned the prestigious Gates Millennium Scholars distinction.

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STEM students graduate with an average of 8 AP or Dual Enrollment credits.

Each summer, LSHS students have the opportunity to study STEM internationally; prior destinations include Switzerland, Costa Rica, Greece, Italy, Panama, Iceland, and China.

LSHS STEM students contributed to 2018-2019 Region 6-5A championships in Softball, Cheerleading, and One-Act competitions (including the 2019 GSHA Actress of the Year).

In addition to annual bids to the state competition, since 2017 the LSHS LeoTechs FIRST Robotics team has earned the Excellence in Engineering Award (2017), the Team Spirit Award (2018), and the Creativity Award (2019).

The mission of Lithia Springs STEM High School School is to EXPOSE students to a rigorous and innovative STEM education, to motivate students to demonstrate maximum EFFORT, to prepare students for a 21st century global workforce, and to instill critical thinking skills and respect for core values by raising EXPECTATIONS and EMPOWERING students for lifelong success.