

MEDICAL ROBOTICS

GRADES 8–12

This document lists the Georgia learning standards addressed by Medical Robotics, True Robotics' grades 8-12 robotics curriculum. Standards are grouped by subject and grade level, with codes and wording as published by the Georgia Department of Education.

5

SCIENCE

6

CS

11

TOTAL STANDARDS

SCIENCE

5 STANDARDS

Based on the Georgia state standards

GRADE	CODE	STANDARD
8	S7L2.c	Construct an argument that systems of the body (Cardiovascular, Excretory, Digestive, Respiratory, Muscular, Nervous, and Immune) interact with one another to carry out life processes.
8	S8P3.b	Construct an explanation using Newton's Laws of Motion to describe the effects of balanced and unbalanced forces on the motion of an object.
8	S8P3.c	Construct an argument from evidence to support the claim that the amount of force needed to accelerate an object is proportional to its mass (inertia).
9–12	SAP4.a	Plan and carry out an investigation to explore the structures and role of the cardiovascular and respiratory systems in obtaining oxygen, transporting nutrients, and removing waste.
9–12	SAP3.b	Analyze and interpret data to explain how the hormones of the endocrine system regulate physical and chemical processes to maintain a stable internal environment.

COMPUTER SCIENCE

6 STANDARDS

Based on the Georgia state standards

GRADE	CODE	STANDARD
8	CSS.CT.6-8.37.2	Create a program individually and collaboratively using a text-based programming language; Identify variables and compare the types of data stored as variables.
8	CSS.CT.6-8.38.3	Develop problem solutions using a programming language, including all of the following: looping behavior, conditional statements, expressions, variables, and functions.

GRADE	CODE	STANDARD
8	CSS.DC.6-8.7.5	Design a computer program that senses something in the real world and changes an output based on the input.
8	CSS.CT.6-8.30	Identify sub-problems to consider while addressing a larger problem.
9-12	IT-PGAS-2	Describe the software application life cycle and use a prototype development model to develop applications.
9-12	IT-CSP-8.4	Connect computing within economic, social, and cultural contexts.

SOURCES & NOTES

- The official science and computer science standards for Georgia, as published by the Georgia Department of Education.
- Codes and standard wording are reproduced from the official standards documents. Clarification statements, examples and assessment boundaries are omitted.
- Grade shows the grade level at which True Robotics lessons address each standard. A range (for example K-2) marks a standard written for a grade band.
- Standards text remains the property of its publisher and is reproduced here for alignment reference only.
- A lesson-level crosswalk is available on request at info@truerobotics.org.