100 Level → 200 Level → 300 Level

100 Level

Introductory courses where the emphasis is on fundamental and skill development. Students may be future majors or not.

Students should be exposed to GenAI for **contextualization** purposes only.

Ethics & Efficiency

Content should be introduced to support students thinking through the consequences of GenAI use in code and the wider world.

Examples: bias in automated selection systems; urban planning for self driving cars; challenges in determining code correctness

200 Level

Core courses in the computer science major. Emphasis on acquiring depth in foundational topics. Rely on 100 level courses as starting point.

Students should be asked to consider the **implications** of GenAI as it relates to core topic areas.

Ethics & Efficiency

GenAI can be used as an additional lens to investigate each course's core learning goals. Continued 100 level discussions are appropriate.

Examples: efficiency in generated code versus human written code (systems, theory); resource utilization (architecture); code quality (software engineering)

Practice & Explain

Exposure to GenAI directly can be useful for **practice** of **assumed previous knowledge**. For instance, reviewing 100 level topics.

300 Level

Elective courses in the computer science major. Tend to emphasize research skills, faculty areas of expertise, and depth on subject matter. Apply skills & knowledge from 200 level courses.

Students can now use GenAI directly for **exploration** and **acceleration**.

Ethics & Efficiency

At this stage, additional emphasis should be placed on **professional responsibility** and GenAI use. Continued 100 level and 200 level style discussions are appropriate.

Accelerate & Extend

Previous GenAI discussions prepare students to **accelerate** and extend their skill sets, where appropriate.

Examples: learning a new library for a larger scale programming project; developing an LLM-integrated application; benchmarking

*But *How* Do They Use It?: Scaffolding the Introduction of Generative AI Across the SLAC CS Curriculum. Anderson & Feldman. 2024.*