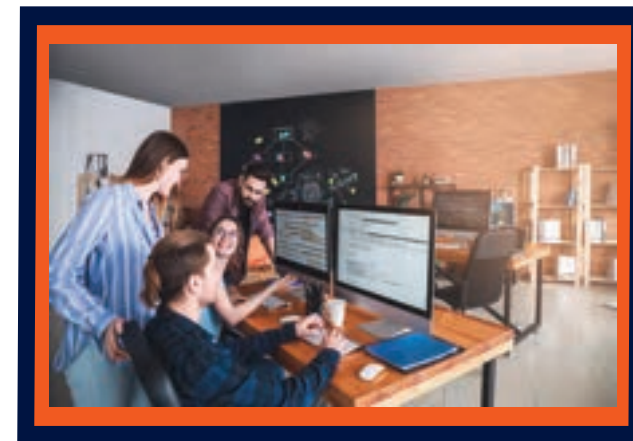
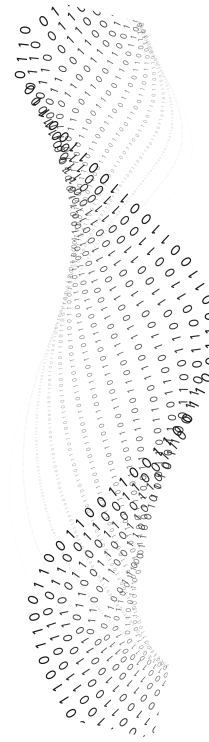




# BIO Coding Club



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# UTSA®

## Department of Integrative Biology

## Why Join?

- Learn how to become a programming biologist
- Learn about in-demand programming languages and why they are popular
- Learn how to choose which program language works best for solving specific problems
- Learn how to choose the programming language based on your career goals
- Make connections
- Meet other students with similar interests



Which Software Should I Choose?	Best for:	Availability	Easy to learn?	Advantages	Disadvantages
<b>SQL</b>	Database manipulating, updating, querying; Extracting, wrangling data	Open and closed source versions available (free and paid)	Relatively easy for basic level; Learning curve for more complex tasks	Very readable	Not general purpose; very specific, limited capability
<b>SAS</b>	Statistical analysis; Data analysis	Paid (free for university edition); Closed source	Yes, especially if you already know SQL	Highly reliable, secure and stable	Relatively expensive
<b>R</b>	Statistical analysis; Data analysis; Single passes of data	Free; open source	Steep learning curve; Relatively easier if no prior coding experience	Minimal coding required for statistical models	Very statistics oriented; Not a general-purpose program
<b>Python</b>	General programming; Data analysis; Deep learning; Repeated tasks	Free; open source	Yes, especially for software engineers	Easy to deploy; General purpose language; Widely used by corporations	Requires rigorous testing