

Freshman

Sophomore

Junior

Senior

Professional Development Workshops, Writing Activities, and Tutoring Services

Research Foundation Course (RFC)—SCI 1301
Mandatory for all BUILD students (including transfers)

NEW BUILD STUDENTS:
2-Week Summer RFC for those with UNIV 1301 credit
or
Fall/Spring RFC SCI 1301

NEW BUILD STUDENTS:
2-Week Summer RFC

Academic Year Mentored Research Experience (AY MRE)—*optional for sophomores*

Two courses required, *same track when available*

Research Driven Course (RDC)
One course required

One course, *when possible*

Peer Mentoring Training and Practice (PMT & PMP)

Research Enrichment Training (RET)—*3 modules each year*

Peer Research Education Leader (PREL) — *optional*

Thesis

BUILD Symposium

Summer Research Program (SRP)—*post-freshman through pre-senior*

Research and Teaching Integration (RTI) Program—*optional*

Summer Boot Camp— Incoming Freshman

**in addition to degree plan*

BUILDing SCHOLARS STUDY PLAN DIAGRAM DESCRIPTORS

Summer Boot Camp (SBC)	Entering freshmen will participate in a three-week intensive education “boot camp” the summer before their first semester at UTEP. The boot camp will run from 8:00 am to 4:00 pm, Monday-Friday, and it will consist of preparation for calculus, statistics, writing, verbal communication, computing, reading comprehension and financial literacy. Also, students will access online modules that are very relevant to the goals of the camp, including modules on STEM (Science, Technology, Engineering and Mathematics), Readiness and Foundations, Responsible Computing, and Argument Diagraming. Weekly technical workshops will also be conducted covering topics such as introduction to the BUILD program, careers in biomedical and health research, leadership and team building, as well as affinity research group models.
Research Foundations Course (RFC)	Some version of our Research Foundations Course (RFC) is required for all BUILD students. If the student has not taken SCIENCE 1301 (or UNIV 1301 or its equivalent), she/he should sign up for our BUILD-specific course during the Fall semester. This course is required in all degree plans. If the student has already taken SCI 1301 (or UNIV 1301 or its equivalent), then she/he must attend the two-week summer RFC, in August of each year.
Research Driven Courses (RDCs)	Research Driven Courses are 1–3 credit-hour courses, which simultaneously fulfill degree plan requirements and provide students with authentic research experiences. While fulfilling the same learning objectives as existing traditional lab or lecture courses, the RDCs will immerse students in cutting-edge research environments that provide opportunities to make original disciplinary contributions while developing relevant skills, acquiring practical experience, and entering a community of practitioners. Students may be able to take more than two RDCs as part of their degree plans. Entering freshmen must take at least two RDCs; if they take the first course in a track or sequence, then they should also take the second course in that sequence (when available) in order to fully develop the research skills being taught. Entering sophomores and juniors should take at least 1 RDC, if it fits within their degree plans. RDCs are offered at the introductory and junior-level in a variety of BUILD majors.
<p>Click here to see videos of current RDCs Scan to see RDC videos</p>	
	
PMT/PMP PREL	BUILD sophomores will participate in Peer Mentoring Training (PMT) and Peer Mentoring Practice (PMP). These are unique opportunities for students to gain mentoring skills and leadership skills through the process of mentoring their peers (i.e., BUILD freshmen). Students will take the mentoring training (2 hours per week) while actively engaging in peer mentoring. They will receive feedback on their mentoring skills so that they can improve. All BUILD sophomores will be paired with and serve as Peer Mentors for freshman BUILD students. Some Peer Mentors who have already taken a Research Foundations Course (RFC) or a Research Driven Course (RDC) may be selected to be a Peer Research Education Leader (PREL) for that RFC or RDC as well.
Professional Development (PD)	Various Professional Development opportunities will be offered throughout the traineeship. There will be opportunities to attend featured colloquia, presentations by student participants, and, once per semester, a presentation by a guest speaker from a Research Partner Institution (see Figure 1). Students will also be required to attend a variety of the workshops listed in the table below:

Title	Freshmen	Sophomores	Juniors	Seniors	FR & SO doing research
Responsible Conduct of Research/Ethics	✓	✓	✓	✓	
Writing Personal Statements	✓	✓	✓		
Developing a Professional Path I: Personal Values, Career Goals, and Professional Image	✓	✓	✓		
Developing a Professional Path II: Researching, Selecting, Applying, & Interviewing for Graduate Programs			✓		
Preparing and Delivering Technical Presentations			✓		✓
Preparing Abstracts Using Research Reports			✓		✓
Preparing a CV/Resume	✓	✓	✓		
Preparing Journal Articles/Undergraduate Thesis					✓
Entrepreneurship I and II					✓
The Research Notebook	✓	✓	✓		
Statistics			✓	✓	✓
Writing Proposals and Applications for the NIH and other Fellowships					✓
Stress Management/Study Habits	✓	✓	✓	✓	

Academic Year Mentored Research Experience (AY MRE)

BUILD students will receive one-on-one mentoring in a research project with a UTEP faculty member during the academic year beginning no later than the fall semester of their junior year. Sophomore students will have the option to begin conducting mentored research on a part time basis if they are not simultaneously serving as PRELs. This mentoring experience with a faculty mentor will allow students to interact with members of their mentor’s lab or research team; students will also gain practical knowledge from their active involvement in the research project. The mentored research experiences will be carried out across seven research nodes: **addiction, cancer, degenerative and chronic diseases, environmental health, health disparities, infectious diseases, and translational biomedicine.**

BUILD’s Symposium

Every year in the fall students will have a unique opportunity to meet BUILD pipeline and research partner faculty and learn about summer programs and graduate school at the research partners at the BUILDing SCHOLARS Symposium. Returning students are required to present a poster about their research, conducted during the academic year or during the summer. Incoming freshman and new BUILD sophomores and juniors will attend the event, but not present research.

Summer Research Program (SRP)

Students will be paired up with a faculty mentor either from UTEP or from a Research Partner Institution (see Figure 1) to participate in an intensive Summer Research Experience. Students going to a Research Partner will travel in groups of 2 to 8. The SRP will be for ten weeks. For those going away, travel expenses, housing, and food will be covered by the BUILD via a sub-award made to the Research Partners. All BUILD students (whether they stay at UTEP or go away) will continue to receive their monthly stipends over the summer.

Research Enrichment Training (RETs)

The RET modules (RTE1, RTE 2, and RTE3), will be delivered in workshop form during the academic years – three modules during the junior year and three modules during the senior year. Such modules will acquaint the students with topics relating to the National Institutes of Health (NIH), such as “Introduction to the NIH and NIH Careers”, “Speaking with NIH Scientists”, and “Applying to Graduate School” for juniors. These modules will also include: “Understanding the Status of Underrepresented Groups in Biomedical Research”, “Learning from a Panel of Successful Local NIH-funded Researchers”, and “Finding Work/Family Balance in a Biomedical Research Career” for seniors.

Research and Teaching

Every year, the RTI Program will provide a select group of up to 10 sophomore, junior, and senior BUILD students and their mentors with the opportunity to translate research findings into classroom teaching

Integration (RTI)	modules, and practice the art of teaching. The program will integrate mentored undergraduate research, guided curriculum design, and peer-led teaching and learning. Selected students will receive \$1,500 in travel funds to present their research results at scholarly meetings or conferences on teaching and learning.
Thesis	The BUILD Training Program will culminate in preparing a senior thesis in the format of a publishable journal article.
Writing and Tutoring Activities	The BUILD Program will be writing intensive. All activities, from the SBC to the RFC, RDC and mentored research experiences will have writing exercises associated with them (such as reports, abstracts, a thesis/journal article, portfolios, etc.). BUILD scholars will be working with a Science Writer to assist them with their writing activities. The BUILD Science Writer will work closely with students during the entirety of their participation, by delivering relevant workshops, providing assistance with their portfolios and grading students' reports. Moreover, BUILD students will have access to tutoring services for those who may need additional help with their courses. For those students who drop below a 3.3 GPA, individual recovery plans, required tutoring, and personal support to help them improve their academic standing will be available.
Additional Notes	<p>BUILD junior and senior students will have a maximum of 19 hours/week of programming and mentored-research outside their coursework during the academic year.</p> <p>Sophomore and freshman students who choose to conduct research will have a maximum of 10 hours/week of mentored research outside their coursework during the academic year.</p> <p>During the summer, they will spend up to 40 hours per week on their research projects and associated activities.</p>

Figure 1. RESEARCH PARTNERS INSTITUTIONS BY RESEARCH NODE

