



General Budget Guidelines for School of Engineering Funding Opportunities Fall 2023

Rev: August 3, 2023

Preparing budgets is a typical requirement when developing a funding proposal, whether it is for an externally-supported project or an initiative funded internally within the School of Engineering. This document summarizes general guidelines for the preparation of such budgets and includes specific costs and rates for several types of expenses, with these numbers being valid as of the date of this document. Applicants are encouraged to discuss their budgetary needs and questions with Associate Dean of Research Christopher Kitts (ckitts@scu.edu), Assistant Dean Kelly Cox (kgcox@scu.edu), and/or Senior Assistant Dean David Clark (dclark2@scu.edu).

It is noted that there are many other considerations that must be addressed when preparing a proposal for an external partner. This includes topics such as intellectual property, non-disclosure agreements, publication restriction policies, use of human subjects, facility requirements, and so on; the list is long! This document does not cover all these topics – it focuses on budget preparation. Some of these other policies with financial implications are briefly reviewed at the end of this document given their impact on the financial budgeting process. For more information on the long list of broader considerations, Dr. Kitts runs a training program that covers many of these issues.

RECENT UPDATES: Recent updates to this document include new graduate student hourly rates and stipends and SCU's graduate tuition rate for the 2023-24 academic year.

NOTE: Faculty should *be aware* that how a project is budgeted may not precisely match how the money from a funded project may actually be spent (in fact, this is rare). This is a critical distinction. For example, one might budget for a student at a specific level and rate. However, if the proposal is funded (which may be many months later) and a student is hired, the actual pay rate for the student depends on the student's status. So, while a PhD student might have been planned and budgeted for, an MS student might actually be hired, and the pay rate for that student will presumably be at a lower rate than what was budgeted (which means excess funds are available within the project to invest in another student, the same student for more hours, or some other option). Similarly, benefits (as explained below) are budgeted at an averaged rate but are expended based on the specific benefit profile of the hired person (which varies and which may change over time). These are just a few examples; the point is that faculty who are managing funded projects must realize that budgeting for a program and managing expenditures for a program are related but distinct functions in which the financial numbers may not match perfectly. Faculty should consider being conservative when preparing budgets for this reason.

Guidelines

1. Proposals generally require both a tabulated quantitative budget as well as a narrative “budget justification” which may be a paragraph or two long and which briefly describes the rationale for the proposed budget line items. Note that for some federal programs, the Sponsored Projects Office (SPO) will provide you with a template for the narrative.

2. Funding programs will typically state which budget categories of funding are permitted and which are not. These budget categories typically include personnel costs (faculty salary, staff salary, student wages), benefits for personnel, travel, research supplies, miscellaneous expenses (communications, postage, etc.), tuition & fees, and indirect costs.

3. For most funding proposals, typical spending categories and the School/University guidelines/policies for each include the following:

a) Personnel costs: Note that during the Fall/Winter/Spring academic quarters, student workers are limited to a maximum of 19 hrs/week of employment by Santa Clara University, across all jobs/appointments they may hold; during the summer and during academic breaks, students may charge up to 40 hrs/week. The wage/stipend rates listed here are specified by HR and endorsed by the Dean. Other rates are NOT to be used.

i) Undergraduate student workers: Undergraduate student hourly wage rates are \$17.20/hour, which is the minimum pay rate as per the Santa Clara County minimum wage law, effective 1/1/23.

ii) Graduate Course Graders & Lab Assistants: Graduate students serving as course graders and lab assistants are paid on an hourly basis at a rate of \$20/hr. Graders only receive hourly wages and do not receive tuition support.

iii) Graduate Teaching Assistants: Graduate student quarterly stipends for TA positions are \$4,750/quarter; this is considered a salaried appointment and includes 8 units of tuition and fees support. Fractional TA appointments are paid on a pro-rated hourly basis at a rate of \$22.75/hr and receive a similar pro-rated level of tuition support; typically, 100% of fees are paid even for part-time appointments. Note that salaried positions are roughly based on a model of \$22.75/hr for 19 hrs/wk for 11 weeks of work; this implies 10 weeks of work during the standard academic quarter in addition to partial availability during the week prior to the start of classes (for lab prep, etc.) as well as partial availability during finals week (for grading, lab cleanup, etc.).

iv) Graduate Research Assistants and Interns: Graduate students may receive wages or a combination of wages and a commensurate level of tuition/fees support; tuition-only support is permitted but typically used for fellowship awards. In terms of vocabulary currently being used by the administration, graduate “interns” receive only hourly wages, while graduate “research assistants” receive a combination of wages and tuition support. Wages may be paid on a salaried (19 hrs/wk during academic quarters) or hourly basis, and the pay rate depends on the student’s degree status, as listed below. Note that, as with TAs, salaried positions are roughly based on 19 hrs/wk for 11 weeks of work; this implies 10 weeks of work during the standard academic quarter as well as work during finals week and possibly prior to the start of the quarter. Salaried research assistants may also be paid hourly during the breaks and summer up

to 40 hours a week.:

- RA's who are Master's Degree students have a salaried rate of \$4,750/quarter (paid out at \$950/period for 5 pay periods, or \$791.67/period for 6 pay periods) or an hourly rate of \$22.75/hr.
 - Post-MS students who have not passed the PhD Preliminary Exam have a salaried rate of \$5,330/quarter (paid out at \$1,066/period for 5 pay periods, or \$888.33/period for 6 pay periods) or an hourly rate of \$25.50/hr.
 - Post-MS students who have passed the PhD Preliminary Exam but who have not yet passed the PhD Comprehensive Exam have a salaried rate of \$5,640/quarter (paid out at \$1,128/period for 5 periods, or \$940/period for 6 pay periods) or an hourly rate of \$27.00.
 - Post-MS students who have passed the PhD Comprehensive Exam have a salaried rate of \$6,270/quarter (paid out at \$1,254/period for 5 pay periods, or \$1,045/period for 6 pay periods) or an hourly rate of \$30.00/hr.
- v) Post-Doctoral Fellows: Post-Doctoral Fellow salaries have traditionally been paid based on the NIH PostDoc annual salary structure, which depends on the number of years experience the fellow has. As of 2/3/2023, the range of such annual salaries is \$56,484 - \$68,604 (for 0-7+ yrs of experience). That said, there has been a lack of consistency in setting such salaries across the university, and HR is currently reassessing the appropriate salary structure for these positions. Faculty preparing budgets for programs that will include postdocs are encouraged to discuss this issue with Dr. Kitts to obtain guidance while the HR reassessment is occurring.
- vi) Cautions and Considerations Regarding Wages: Please be aware of the following:
- Overtime: Overtime is distinct from working more than 19 hrs/wk. Overtime may or may not be authorized for some positions and/or funding sources; faculty should check with the Sponsored Projects Office and/or the Dean's Office for guidance on overtime if they hope to use it. When personnel work such that they qualify for overtime, they must be paid accordingly whether it was authorized or not (so, supervisors should manage their employees accordingly to prevent this if overtime is not authorized for their program). The university has explicit explanations of how overtime is accrued, and it can apply to students even if they work less than or equal to the 19 hrs/wk limitation (e.g., excessive hours/day, work on holidays, etc.). As per HR, overtime includes hours worked over 8 on a single day, over 40 in a work week, and/or hours worked on a university holiday; consult with HR on overtime and double time policies.
 - Maximizing Graduate Student Financial Support: There is flexibility in how a graduate RA's support can be provided given the option for either salaried (e.g., stipend-based) or hourly wage support. The rates provided above are for appointments during the academic quarter as described. It is possible, however, to pay students additional wages during holiday periods, breaks, etc., and during these times students may be paid up to 40 hours/wk except for when holidays limit work hours. Faculty interested in maximizing student pay (by providing the potential for funding during breaks, etc.) can select different support options.
 - One choice is to pay hourly wages at all times, in which case the student simply charges up to the appropriate weekly limit depending on if work was performed during an academic quarter or break.
 - Another option is to pay quarterly appointments via stipend but to arrange a separate hourly appointment for charging hourly wages during breaks. This may result in the student having more than one position control number, so that must be managed

accordingly.

- Faculty should be aware of the fact that there are on the order of 20 holiday days each year given the combination of observed federal holidays as well as university holidays for periods such as Christmas/New Years, etc. Students generally are not approved to work during holidays, and if they do, overtime pay may be required. So, while one may prepare a budget that covers such days, it may be the case that one will not be able to actually pay students on such days.
- A plausible budgeting strategy to maximize RA pay over an entire year (to include summer work) would be to plan on 33 wks of pay at 19 hrs/wk (given three 11-week academic quarters), and 15 wks of pay at 40 hrs/wk (given the summer and academic year breaks). This presumes ~4 wks of academic holidays which is typical (10 government holidays and often around 10 days of additional academic holidays declared around holidays, etc.). Faculty may budget for more additional weeks, but there may simply not be an opportunity to pay out those funds given restrictions on student work (unless overtime and possible double time is planned and paid).
- **Cost of Living Support:** There may be occasions in which the Dean of Engineering approves and funds a “cost of living” funding allocation for some students. This is not a predictable funding source and budgets should not be prepared with any expectation that such funds may be made available. For questions on this topic, please contact Dr. Kitts.

b) **Benefits:** Given the low cost of student benefits, these can generally be ignored when preparing a budget for a School of Engineering funding program; the School of Engineering will take care of these expenses separately. For other proposals (e.g., via SPO or the Development Office), the benefit rates are as follows:

- i) **Faculty benefit rate:** The estimated faculty and post-doctoral fellow benefit rate is 36% during the entire academic year, and 10.5% during the summer.
- ii) **Staff benefit rate:** The estimated staff benefit rate is 36% during the entire calendar year.
- iii) **Student benefit rate:** The student benefit rate is 0.85% of wages during the academic year, and 8.5% during the summer.
- iv) **Cautions and Considerations Regarding Benefits:** Please be aware of the following:
 - It should be noted that no other benefit costs may be budgeted or paid given current School of Engineering financial support policies. In particular, health benefits may NOT be paid as a direct cost from university funding sources.
 - It should be understood that the benefit rates stated here are averaged (and typically conservative) estimates, based on the average full time benefits provided across the university for faculty, staff and students. Actual benefit charges, however, for awards are based on the actual benefits charges for each individual, which generally vary. This budgeting practice of using average rates is done given that it is impractical to develop a budget based on the benefits for individual personnel, some of which may be unknown or may change during the period of an actual award.
 - Faculty should be aware that actual charged rate may vary dramatically from the estimates if a faculty or staff member is not full time but qualifies for full benefits (to include benefits for his/her family); proposal developers should contact the Sponsored Projects Office to discuss this issue if a proposal will be funding a part-time staff member, post-doctoral fellow, or faculty member since these personnel may still draw full benefits depending on their appointment.

- c) Travel: Travel expenses of up to \$1,000 can be justified with a simple statement regarding the activity/event/conference for which the funds will be used. Expenses more than \$1,000 should generally include a detailed breakout of expected costs for specific travel expense categories such as airfare, per diem, mileage, conference fees, etc. Note that, for Sponsored Projects Office proposals, international travel may require separate approval by the sponsor and an itemized budget.
- d) Research supplies: Supply expenses of up to \$1,000 can be justified with a simple statement regarding the nature of the components to be purchased. Requests for more than \$1,000 should generally include a detailed breakout for specific high-cost items; in some cases, vendor quotes may be appropriate for inclusion.
- e) Capital equipment: Capital equipment is equipment costing more than \$5,000. Such equipment is budgeted separately from research supplies given that for many sponsors, indirect costs are NOT applied to capital equipment. In many cases, collections of lower costs components may be declared as capital equipment if they are being assembled into a larger system that, if purchased in a complete form, would be considered as a piece of capital equipment. Note that proposals to acquire capital equipment may require multiple bids or a sole source justification; this should be coordinated with the Purchasing Department.
- f) Miscellaneous: Miscellaneous expenses are typically not expected to be more than \$500. Otherwise, specific items should be separated into their own budget categories.
- g) IRB Costs (for multi-institution awards from federal agencies and which involve human subjects): Some research activities require review by an Institutional Review Board (IRB). Experiments involving human subjects are a typical type of research that requires such review. For SCU programs, investigators have their research plans reviewed by SCU's IRB free of charge. However, for multi-institution proposals to federal agencies and involving human subjects, the lead institution may pay for a review of the team's plans and then charge a fee to the sub-awardees. This fee may be on the order of several thousands of dollars each year. For proposals such as this, extra time may be required for SPO personnel to learn what these costs may be (so plan ahead!).
- h) Tuition and fees: 1 unit of graduate tuition is \$1,160/unit for the 2023-24 academic year. Graduate student fees for one quarter are \$190. As an example, for the 2023-24 academic year, standard full-time funding for a graduate student would normally include 8 units of tuition (\$9,280) and fees (\$190), for a total of \$9,470. Requests for fractional tuition support (e.g., for 4 units of tuition in a quarter) may still include 100% of the quarterly fees (e.g., \$4,830 covers 4 units of tuition and all fees for a quarter). Funds may not be used for undergraduate tuition or fees. Note that, in general, graduate students are not traditionally compensated solely through tuition support; an equivalent level of wage support is typically provided, or wage-only compensation is provided. The exception to this is tuition support made through fellowship and scholarship programs.
- i) Indirect costs: Indirect costs (IDC) are not included in budgets for internal School of Engineering funds. For external grants, the rates are 37% (on campus) and 14.6% (off campus). Indirect costs are applied to all budget line items with the exception of a) tuition, b) subcontract funding above \$25,000 (e.g., the IDC rate is applied only to the first \$25,000 of a subcontract), c) participant costs, d) capital equipment, and e) a set of material/component purchases for which the materials/components will be assembled/fabricated into a larger scale piece of equipment or system which would qualify as capital equipment (check with SPO regarding the applicability of this policy to your project).

4. Budget templates are available from SPO. Budgets normally are prepared as a spreadsheet with budget categories arranged vertically in a specific order and the projected expenses for each category listed to the right of each category. Multiple columns for expenditures may be required in order to break the expenses for each cost category into different periods, such as fiscal years, phases of the project, or other categories. Budgets requiring cost share often include columns showing the matched funds for each category. In some cases, such as with federal sub-contracts, a sponsor may require expenses to be grouped into equivalent pay rates (which may include the wage, benefits and IDCs for each person proposed within the budget). SPO's pre-award specialist is available to assist with budget preparation for external awards.

Related Policies

Indirect Costs. Direct costs are the funds budgeted and expended for specific costs associated with conducting a project. This includes salary/wages, benefits, travel, research and capital equipment, tuition, and so on. However, these projects generally rely on a wide variety of other services and functions that the university provides without levying a “direct cost” that is paid by the project. Such services include providing facilities, utility costs, infrastructure services (IT, library, etc.), etc. Given this, externally funded projects are typically charged “IDCs” (indirect costs) as a contribution to these non-direct expenses. IDC rates are negotiated with the government, and as such the rules regarding IDCs are fairly strict.

- Non-Standard IDC Rates: Changes to the IDC rate (e.g., waiving IDC altogether or using a lower overall rate) may be possible given sponsor requirements or other arrangements; for example, some foundations limit or even prohibit IDC costs. However, submission of a proposal with such consideration requires Provost Office approval via SPO. Note that philanthropic gifts are spent without the application of IDC charges.
- IDC Sharing: The University and School currently have IDC funds “sharing” policies. Currently, the university/provost’s office keeps 30% of collected IDC funds and ‘returns’ 70% of these funds to the School/College of the faculty PI. The School of Engineering currently has a policy to provide a portion of this money (17.5% of the total IDC collected by the university or 25% of the funds returned to the School) to the faculty PI, typically as a deposit in that faculty member’s professional development account. These sharing percentages may be varied in the case of awards with multiple faculty PIs within the School, awards with multiple PIs with some from other campus units, and awards that involve non-standard IDC charges.

Student Support Rates: The wage rates listed earlier in this document represent University and School policy on allowable pay rates. The rates are, by all accounts, lower than we would like, and considerable efforts are underway to raise these rates. Until that is done, however, *these are the rates that must be used.*

Cost-Sharing: Some sponsors may desire or require cost-sharing by the university in order to apply for a grant (this is not uncommon for foundation grants). Cost share contributions should be reviewed carefully with the Associate Dean of Research, as well as with personnel from SPO and/or CFR.

- A PI may provide cost-share through his/her own applicable research/lab/start-up funds or those of other members of the proposal team. A typical source of cost share is for the PI and faculty on the proposal team to “contribute” a portion of their time during the academic year, assuming that a part of their contract includes university support of research. For a typical tenure track faculty member, such a contribution may be on the order of 5-20% of their time (given that roughly 40% of such a faculty member’s time is for research). The cost share associated with this may include the contributed salary as well as the benefits and IDC costs associated with this salary. The PI may also consider contributing their portion of any IDC return to the cost-share sum.
- There are MANY other ways to generate legitimate cost share contributions BEFORE you might ever need to approach the Dean for a contribution. For example, faculty are given professional development funds every year by the Dean – perhaps one project-specific trip is committed to the program as cost share. Faculty obtain course equivalent credit for research advising; so, advising of students on the project can be used to generate an appropriate cost

share. If the project uses any specialty campus equipment or facilities that have published use rates, that can be used for match as well. Industry contributions are often also a viable source of match (yes, the match often does NOT have to come only from the academic institution). So, having one or more industry partners can be beneficial. Perhaps they'd want to provide cash funds to join the effort. But even without that, their in-kind involvement can be used to estimate a match. For example, perhaps an industry representative will be a project advisor with an established number of hours/year of involvement. Use of industry facilities or equipment can also result in an estimation for matching support.

- If a PI expects or needs contributions from the School or University, this will certainly require time to orchestrate how this might be done. As a result, PIs must plan accordingly or will risk not being able to submit their proposal on time. Contributions from the School or University may be appropriate for the acquisition of major research instrumentation/equipment or other investments with strategic value beyond the specific scope of the funded project. Requests for School matching funds should be coordinated first verbally so that all parties understand the scope of the work being proposed, matching requirements/considerations, constraints, policies, etc. Any cost share that is then to be considered must be requested with a detailed budget and narrative budget justification; follow-on discussions will be based on this document and its iterations over time. This process can easily take a month or more, so PIs should identify such interests early in the proposal process.

Intellectual Property (IP) Costs: IP issues include ownership, royalty distribution, etc.

Ownership: For federal grants, foundation grants and philanthropic gifts, the ownership of any IP developed as part of a funded project typically resides with the university.

For corporate awards, the default policy is that IP would reside with the university, like other awards. Such an agreement would typically include a license for the corporate sponsor to use the IP for a period of time, possibly in perpetuity. However, this may not be acceptable for the company. Given that, other options may be available:

- One option is for SCU to maintain the IP but to grant the sponsor an exclusive license; this may require consideration of an extra fee for exclusivity, to be negotiated.
- In some cases, the corporate partner may want to own all IP associated with the project. Note that many universities won't consider this, so the fact that SCU does means that we may be able to work with companies that won't work with other universities due to such a policy (many of these universities are R1 institutions). Options for corporate IP ownership include the following:
 - Traditionally, the right for the company to own all IP requires a negotiation with the university; so, it's possible, but can take a long period of time and may be hard to predict the result. This remains an option for any project.
 - Alternatively, SCU now offers an option to allow corporate ownership of IP for a specific cost, known up front. This cost is equivalent to the amount of standard on-campus IDC costs that are embedded in the project budget (e.g., the IDC amount is paid two times, once for traditional indirect costs and a second time as the IP ownership fee).
 - Note that a PI and/or the university may not want to allow for a company to own the IP generated by a project, in which case this option does not need to be exercised (although it might mean that the sponsor may not pursue the agreement). In particular, it is advised

that IP associated with the primary research work of a researcher is NOT sold to a sponsor given the likely desire of the PI to continue development of the work being considered.

- A third option may exist, which is joint or fractional ownership of any generated IP. If fractional, the university's position on the appropriate split of ownership will often be based on the university PI's opinion of what this fraction should be. However, since the fraction may be debated, it is strongly advised that the methodology for determining fractional IP ownership is discussed and agreed upon prior to finalizing any agreement.
- It is critical to note (since it is a common misconception on the part of some faculty) that standard IDC costs do NOT include costs for any sponsor ownership of IP.

Royalty Distribution. The distribution of royalties from IP income is governed by the Faculty Handbook. As of August 2023, this policy stated:

Where royalties are generated as a consequence of licensing an invention owned by the University, net royalties received by the University will be determined as net of direct and indirect expenses incurred in securing and managing the patent. Of these net royalties, the University will pay 50 percent to the inventors and the remaining 50 percent will be allocated to a separate University fund to support research and related activities unless otherwise agreed to in writing. An agreement with a sponsor that allocates royalties between the sponsor and the University may be entered into with the approval of the Office of Research Initiatives.