SAN DIEGO STATE UNIVERSITY

Georgia

SDSU 328-11-16

November 4, 2016

Magda Magradze
Chief Executive Officer
Millennium Challenge Account – Georgia

Dear Ms. Magradze,

Please find enclosed herewith the Sustainability Plan sumamry, a deliverable for the Provision of Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics, as required per the contract.

Per the terms of the agreement, please provide review comments within 10 business days.

Please feel free to contact me if you have any questions.

Sincerely,

Kenneth D. Walsh, Ph.D.
Dean, SDSU-Georgia

SAN DIEGO STATE UNIVERSITY

Georgia

Sustainability Plan

October, 2016

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1 INTRODUCTION

1.1 Project Overview

The SDSU-Georgia program was initiated in July of 2014 under a 15-month contract to cover those activities prior to the enrollment of students. This period was referred to as the "pre-enrollment period." The first cohort of students was enrolled in September of 2015. This report is a requirement of the subsequent contract, initiated in October of 2015, which covers the remaining 45 months of the project.

1.2 Purpose of this document

This document is intended to provide a summary of the plans to achieve long-term sustainability of the program. The report is a regularly submitted document that is expected to be submitted in the early part of the Fall semester.

2 BACKGROUND

At present, the revenue that supports this project comes largely from three sources: Tuition from students, a lump sum contribution from the Government, and Compact funding from MCC. The first two sources are tied to the number of students enrolled in the program. Student tuition is obviously collected from the number of students enrolled. Per the terms of the Memorandum of Understanding between the Government and SDSU, the lump sum amount is equal to the number of students enrolled times (at present) 2250 lari, up to a maximum of 500 students per cohort.

Compact funding from MCC is time-limited, in the sense that the Compact will be completed in the summer of 2019. By that time, the project must be able to sustain itself. For this to occur, either the number of students must be large enough that the sum of the first two sources will be large enough to cover all costs, or some additional funding sources must be identified to augment the per-student revenue sources of tuition and the Government lump sum contribution.

Currently, enrollment is running behind expectations, with approximately 80 in the first cohort and 115 in the second cohort. Because the first two revenue sources stated above are tied to the number of students enrolled, this means that the revenues have fallen short of expectations. This shortfall produces a concomitant budget gap of approximately $2.7M for the 2 cohort model. This gap is illustrated in the budget summary, presented in Appendix 1.

In the recent budget discussions between MCA-G and SDSU for the upcoming funding period, this budget gap was addressed by temporarily re-programming funds from the proposed ISU building to cover operating costs. The resulting budget summary is presented in Appendix 2. Subsequently, discussions were held with the Government and with others to attempt to identify other funds. In these discussions we worked from a potentially sustainable model that can support the program as currently envisioned. This model will be described in this report.

In recent discussions to develop revised agreement for the upcoming funding period, which extends through the summer of 2017, this approach was intensively discussed. The current agreement calls for efforts to develop additional funding sources for scholarships for the upcoming cohorts of students, with the establishment of a working group. The budget was temporarily reallocated from the new building on the premises of Ilia State University to operations, pending resolution of the MoU revisions and recruitment outcomes for cohort 3. These issues will be assessed early in 2017, and adjustments made to the project accordingly. This report assumes that these efforts are successful in recruiting new students in sufficient numbers; if this assumption proves incorrect, a collaborative solution will be developed. Appendix 3 presents the key portions of the revised agreement formalizing this overall approach, including the budget allocations.

3 SUSTAINABLE ENROLLMENT PROJECTIONS

3.1 Underlying Assumptions

The determination of the enrollment level that will support a sustainable, break even budget, is based on a number of assumptions as outlined here. Deviations from these assumptions would have an impact on the results.

- Lari-Dollar exchange rate: assumed stability at approximately the current exchange rate, or about 2.31 lari to one USD.
- Cost-of-living adjustment (COLA): assumed modest COLA of about 3.5% applied to salaries.
- Student attrition: this model assumes a net attrition of about 5%. This represents the number of students lost on an annual basis in each year of the cohort's studies.
- Government lump sum support: this model assumes that the per student support from the Government remains fixed at 2250 lari. Based on discussions with the Government over the summer, this model assumes that the lump sum is provided for 500 seats per cohort, regardless of the number of students actually enrolled in that cohort. This reflects the funding described in a revised Memorandum of Understanding between the Government and SDSU currently under review by the Government.
- Tuition for Georgian students is fixed at 7500 USD, augmented by the Government lump sum amount, throughout the entire model.
- Scholarships as a percentage of student tuition: We believe that family pay must increase over the life of the project. For this effort, we have assumed that scholarships support only 65% of student tuition for cohort 3, and 50% for the remaining cohorts.
- Tuition for international students fixed at 13500 USD throughout the entire model, with 25% of students receiving a 25% scholarship against that amount.
- Scholarship funds from GRDF previously committed are used to support the two existing cohorts of students. The portion of tuition covered by families for the first cohort was quite low, with scholarship funds covering about 98% of tuition. With growing awareness of the SDSU-G program, for the second cohort GRDF funds are directed only to about 75% of student tuition. We believe that family pay must increase over the life of the project. For this effort, we have assumed that scholarships support only 65% of student tuition for cohort 3, and 50% for the remaining cohorts.
- Administrative fees to cover campus operations remain as stated in the proposal at 26% of tuition.
- Merit scholarship levels: this model assumes that about 90% of the students receive a merit scholarship on the basis of their NAEC scores, with those students receiving an average of about 70% awards. These numbers are based on the experience of the existing cohorts. This amount is directed to the partner universities.
- SDSU augments these merit scholarship funds to bring the per student funding for each partner up to 2250 lari per student enrolled through that partner. In addition, SDSU provides 100 lari per student who takes classes at one partner university, but is enrolled through a different partner university.
- The proposed new building, to be shared by SDSU and ISU and located on the ISU campus, is included as originally proposed in this model.

3.2 Enrollment Level

The goal of this analysis was to identify a sustainable enrollment target. The number of students in the first and second cohort are not modified in this analysis, except by the estimated net attrition rate. Some students may be added by mobility, while others will be lost to disqualification or change in interest, but the net effect for now is modeled by the application of the attrition rate to the number of students enrolled each year. Therefore, the objective is to seek a target enrollment in future cohorts which yields an approximately break-even budget over several years.

For purposes of this exercise, the number of years modeled was limited to 6 cohorts and the ensuing teach-out process, or a total of 9 years of academic activity (CY10 counting from the start of the Agreement, including the first year of preparation, or through the 23/24 Academic Year). Over that time horizon, there are many changes in the project that impact cost structure. These include, for example, the ebb and flow of the construction and renovation effort and the equipping of spaces. As a consequence, this assessment does not have a closed form solution, and was addressed by trial and error with potential cohort sizes. We determined that a cohort size in the range of 225 Georgian students and 50 international students (or any combination with similar overall funding levels) will result in a balanced budget with some risk premium. An intermediate enrollment level between cohort 2 and the sustainable level was assumed for cohort 3. The resulting budget summary is presented in the next section.

3.3 Description of Sustainable Budget Case

The budget summary is presented on the next page, with numbered circles used to direct the reader to explanation. The model is divided to show revenues the top section, expenses in the middle section, and summary data along the bottom.

Revenue Projections:

1. Georgian tuition revenue is taken as the per student tuition of $7500 times the enrollment of Georgian students in a given year. The two lines below provide a breakdown of the amount covered by scholarships and by families in each case. Note, the merit scholarships cover a portion of the tuition as well.

2. Scholarship funding is shown here as a revenue, with GRDF used for CY2 and CY3, and the request presented to the Cartu Foundation in subsequent years.

3. The Government Lump Sum contribution of 2250 lari per student is shown in this line. For CY2, this amount was calculated by multiplying by the number of students enrolled. For CY3 and subsequent, this amount is calculated by multiplying by 500 students per cohort, as reflected in the revised MOU currently under review. This is presented in USD using the currency conversion presented previously.

4. MCC funding is presented last. The MCC Operational funding is that portion of the MCC grant not directed to construction/renovation. Note that in Appendix 1, the MCC Supplemental line is not all zero, reflecting the re-direction of funds from the ISU building. In this model, the original funding levels have been restored, so the Supplemental line is zeroed out.

SDSU-Georgia STEM Degree Program Operations -- Executive Summary

Revised MOU, including CARTU request and New ISU building, 6 cohorts

		CY2 AY 2015/16	CY3 AY 2016/17	CY4 AY 2017/18	CY5 AY 2018/19	CY6 AY 2019/20	CY7 AY 2020/21	CY8 AY2021/22	CY9 AY2022/23	CY10 AY2023/24	Totals	
Revenue												
Georgian Tuition (net)		$ 607,500	$ 1,447,500	$ 2,662,500	$ 4,230,000	$ 5,197,500	$ 5,925,000	$ 4,590,000	$ 2,985,000	$ 1,455,000	**$ 29,100,000**	Tuition X GEO student enrollment
(1)	**Scholarship**	**$ 592,970.03**	**$ 1,297,220.56**	**$ 2,061,109.53**	**$ 2,801,804.05**	**$ 3,017,788.95**	**$ 3,117,346.41**	**$ 2,286,457**	**$ 1,484,895**	**$ 723,410**	$ 17,383,001	
	Family pay	**$ 14,530**	**$ 150,279**	**$ 601,390**	**$ 1,428,196**	**$ 2,179,711**	**$ 2,807,654**	**$ 2,303,543**	**$ 1,500,105**	**$ 731,590**	$ 11,716,999	Due from families, reduced by merit scholarships
Int'l Tuition (net)	(2)	$ 9,000	$ 131,625	$ 435,375	$ 934,875	$ 1,390,500	$ 1,734,750	$ 1,400,625	$ 914,625	$ 448,875	**$ 7,400,250**	Tuition X Int'l student enrollment
GRDF (total funding)		$ 650,000	$ 1,490,063	$ 1,490,063	$ 1,490,063	$ 840,063					**$ 5,960,251**	GRDF allocations for Scholarships and Student Support Services Cohorts 1 and 2
CARTU Scholarships	(3)	$ -		$ 828,750	$ 1,672,500	$ 2,516,250	$ 3,360,000	$ 2,531,250	$ 1,687,500	$ 843,750	**$ 13,440,000**	CARTU Scholarship request
GoG Lump Sum W/Supplement		$ 78,896	$ 974,025	$ 1,461,038	$ 1,948,050	$ 1,948,050	$ 1,948,050	$ 1,461,038	$ 974,025	$ 487,013	**$ 11,280,184**	Amended MoU SDSU-GoG starting CY3
MCC Operational Funding	(4)	$ 2,441,345	$ 1,461,835	$ 1,352,300	$ 941,791	$ -	$ -	$ -	$ -	$ -	**$ 6,197,271**	MCC Funding ends as of July 26, 2019
MCC Supplemental		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**	Building reallocation is reversed
	Total	**$ 3,786,741**	**$ 5,505,048**	**$ 8,230,025**	**$ 11,217,279**	**$ 11,892,363**	**$ 12,967,800**	**$ 9,982,913**	**$ 6,561,150**	**$ 3,234,638**	**$ 73,377,955**	
Expenses												
GRDF Expenses												
Scholarships	(5)	$ 592,970	$ 1,297,221	$ 2,061,110	$ 2,801,804	$ 3,017,789	$ 3,117,346	$ 2,286,457	$ 1,484,895	$ 723,410	$ 17,383,001	98% Cohort 1, 75% Cohort 2, 65% Cohort3, then 50%
Student Support Programs		$ 211,220	$ 256,330	$ 387,550	$ 556,840	$ 661,330	$ 767,260	$ 517,800	$ 336,780	$ 164,180	$ 3,859,290	Learning Centers, Mentors, Interns, Clubs, books, Libray/Info Resources, etc.
Unobligated GRDF		$ (154,190)	$ (63,488)	$ (129,847)	$ (196,082)	$ (322,806)	$ (524,606)	$ (273,007)	$ (134,175)	$ (43,840)	$ (1,842,041)	Scholarship or student support programs to fund out of tuition
	Subtotal	**$ 650,000**	**$ 1,490,063**	**$ 2,318,813**	**$ 3,162,563**	**$ 3,356,313**	**$ 3,360,000**	**$ 2,531,250**	**$ 1,687,500**	**$ 843,750**	**$ 19,400,250**	
GoG LS Expenses												
GELS/class/student - not co-enrolled	(6)	$ 6,935	$ 13,377	$ 25,844	$ 42,597	$ 53,896	$ 62,403	$ 48,701	$ 31,688	$ 15,455	$ 300,896	Pays Partner universities whose facilities are used for non-co-enrolled students
Merit Sch Co-Enrollment Tuition Shortfall		$ 26,270	$ 50,244	$ 92,417	$ 146,826	$ 180,409	$ 205,661	$ 159,322	$ 103,611	$ 50,504	$ 1,015,265	Covers difference between Partner tuition of 2250 GEL and the merit scholarship
	Subtotal	**$ 33,205**	**$ 63,620**	**$ 118,261**	**$ 189,424**	**$ 234,305**	**$ 268,063**	**$ 208,023**	**$ 135,300**	**$ 65,959**	**$ 1,316,161**	Funds to partner universities
Tuition Expenses												
Faculty Compensation	(7)	$ 627,664	$ 833,991	$ 1,577,446	$ 2,083,592	$ 2,243,811	$ 1,975,645	$ 1,762,106	$ 2,139,762	$ 1,781,982	$ 15,025,998	Includes SDSU Main Campus and Georgian Faculty
Faculty & Support Staff Travel		$ 107,684	$ 134,132	$ 188,661	$ 451,536	$ 460,567	$ 453,971	$ 370,720	$ 261,712	$ 162,909	$ 2,591,894	
Laboratory Resupply (Chem/EE/CompE)		$ 2,532	$ 33,143	$ 69,869	$ 110,138	$ 151,252	$ 190,083	$ 194,495	$ 164,038	$ 67,600	$ 983,148	
International Student Partner Tuition		$ 3,760	$ 12,662	$ 41,883	$ 89,610	$ 133,441	$ 166,558	$ 134,415	$ 87,662	$ 42,857	$ 712,850	Funds to partner universities
	Subtotal	**$ 741,640**	**$ 1,013,929**	**$ 1,877,859**	**$ 2,734,877**	**$ 2,989,071**	**$ 2,786,257**	**$ 2,461,736**	**$ 2,653,174**	**$ 2,055,348**	**$ 19,313,890**	
Compact funded expenditures												
SDSU_Georgia Personnel Staff		$ 1,003,852	$ 775,937	$ 989,066	$ 1,023,684	$ 1,187,050	$ 1,228,596	$ 1,271,597	$ 1,189,530	$ 1,231,164	**$ 9,900,476**	Faculty, Administrative, Management staff
Personnel Allowances		$ 142,942	$ 116,867	$ 124,241	$ 128,748	$ 106,801	$ 167,342	$ 107,894	$ 108,457	$ 139,031	**$ 1,142,324**	Relocation, housing, dependent schooling, home leave, etc.
Travel		$ 111,700	$ 113,934	$ 116,213	$ 118,537	$ 120,908	$ 123,326	$ 38,853	$ 39,630	$ 40,422	**$ 823,522**	Administrative, faculty, recruiting, etc.
General Operations	(8)	$ 47,340	$ 45,247	$ 69,228	$ 70,613	$ 72,025	$ 60,217	$ -	$ -	$ 62,649	**$ 427,319**	Supplies, materials, communications, etc.
Student Recruitment		$ 243,976	$ 254,356	$ 258,833	$ 283,909	$ 289,087	$ 161,880	$ -	$ -	$ -	**$ 1,492,040**	CIE Contract, $1000 fee per int'l student, Marketing Materials/activities
Capacity Building		$ 207,744	$ 374,400	$ 688,088	$ 791,849	$ 795,686	$ 849,500	$ 854,490	$ 859,580	$ 600,000	**$ 6,021,338**	Geo Partner faculty training and travel
Contract Services		$ 99,000	$ 218,520	$ 256,576	$ 185,387	$ 186,215	$ 187,059	$ -	$ -	$ 188,799	**$ 1,321,555**	HR Support (Grant Thornton) and Legal Services
	Subtotal	**$ 1,856,554**	**$ 1,899,261**	**$ 2,502,244**	**$ 2,602,727**	**$ 2,757,772**	**$ 2,777,919**	**$ 2,272,834**	**$ 2,197,197**	**$ 2,262,066**	**$ 21,128,574**	
Administrative Fees		$ 160,290	$ 410,573	$ 805,448	$ 1,342,868	$ 1,712,880	$ 1,991,535	$ 1,557,563	$ 1,013,903	$ 495,008	**$ 9,490,065**	Per project proposal, 26% fee applied to net tutition versus standard 32.87%
	Total	**$ 3,441,688**	**$ 4,877,445**	**$ 7,622,625**	**$ 10,032,458**	**$ 11,050,340**	**$ 11,183,775**	**$ 9,031,406**	**$ 7,687,073**	**$ 5,722,130**	**$ 70,648,940**	
	Revenue - Expenses	**$ 345,053**	**$627,603**	**$607,400**	**$1,184,821**	**$842,023**	**$1,784,025**	**$951,507**	**($1,125,923)**	**($2,487,492)**	**$2,729,015**	Deficit due to GRDF changes, addn'l of Lab resupply, attrition change, etc.
											$886,974	Net surplus after scholarship/student life from above

Sustainable Enrollment (TBD)	CY2	CY3	CY4	CY5	CY6	CY7	CY8	CY9	CY10
Entering Georgian Students	81	115	170	225	225	225	0	0	0
Entering International students	2	11	30	50	50	50	0	0	0
Freshmen-Senior Cumulative	**83**	**206**	**398**	**656**	**830**	**961**	**750**	**488**	**238**
Georgian Graduated Cumulative				**72**	**172**	**319**	**513**	**707**	**901**

(9) (10)

Gross Cost per Student	**$ 34,322**	**$ 17,380**	**$ 13,974**	**$ 11,022**	**$ 9,678**	**$ 8,394**	(11)				**Includes all expenses -- partner subsidies, recruitment, capacity building, etc.**
Adjusted Cost per Student	**$ 25,847**	**$ 13,350**	**$ 10,977**	**$ 8,995**	**$ 8,030**	**$ 7,025**					**Excludes Recruitment, capacity building, and 20% of Personnel and Travel**

Expense Projections:

5 This presents expenses that can be covered by GRDF funds, according to the terms of the GRDF agreement. For the period where GRDF funds are used, scholarship and student support activities are funded by those funds. Subsequently, these expenses are covered by other revenues, chiefly tuition. The line labeled "Unobligated GRDF" represents the differences between GRDF and scholarship income as compared to the anticipated expenses, and thus represents the amount of funding that has to be covered out of tuition revenues. Note that the scholarship amount shown here is also presented in the scholarship/family pay breakdown, pointer number 1. These funds are not double counted, the presentation of this number at pointer number one is just for reference and is not included in the total.

6 Some expenses that represent payments from SDSU to the partner universities in order to make sure that they have revenues up to the amount of the Government Lump Sum for each student enrolled through that partner, and in recognition of use of their facilities by students enrolled at other partners, are presented here.

7 Expenses that are directly related to enrollment levels are presented here. These include faculty compensation, travel expenses for SDSU faculty who are involved in teaching in Georgia, laboratory supplies, and payments to partner universities for international students enrolled through that partner.

8 This section presents expenses that are funded directly during the MCC period. The distinction between this section and the previous section is lost after the end of the MCC period, but is preserved here for convenience in comparison with other budget documents. Expenses here include support of the Dean's office, travel of SDSU administrators to Georgia, general operational expenses associated with the fixed plant, recruitment, capacity building, and contract services (including our accounting and legal services in Georgia).

Summary Data:

9 A tracking of revenues less expenses is presented. However, because of the accounting related to allowable GRDF expenses, there is an adjustment needed based on those activities that must be supported out of tuition revenues, previously described in item number 5. This means that the net overall outcome is a surplus of $886,974. This represents a risk pool that can be used to help offset deviations from the assumptions, as additional scholarship funds, or be reinvested in laboratory modernization or additional degree program infrastructure.

10 A summary of the number of students enrolled in each cohort is presented. There is student attrition along the way, so the number of students enrolled across all four years of study is also presented. In addition, the projected number of graduates among Georgian citizens is accumulated along the way. Note that for purposes of this model, as previously explained, only those students enrolled through the sixth cohort are tracked, and the expenses associated with them. Consequently, this model does not show the enrollment of students after that level, which is why zeroes are shown for entering Georgian and international students in CY8, 9, and 10. In fact, we expect that enrollment growth will continue beyond CY7. Our initial cohorts of students will have graduated by that time, and will be in the workplace, which should make recruiting activities much easier. The overall economy will presumably be advanced by that time, which should improve family ability to pay. In short, it is difficult to predict conditions that may occur by that time at present, so this particular report uses only this period of projection. As the time draws nearer, it will be possible to more accurately assess what may be needed from private sources and/or Government, as compared to students, and additional projection efforts can be undertaken.

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A summary of the cost per student, broken out in a couple different ways, is shown. The critical point is that by the end of this period, the cost per student has dropped below the projected revenue per student, meaning that the program would be sustainable going forward.

4 CONCLUDING COMMENTS

The model presented here demonstrates that a sustainable enrollment level that reflects an attainable level of students. This model relies heavily on two factors:

1. Additional lump sum funding from the Government at 500 students per cohort, rather than at actual enrollment up to 500 students per cohort, to provide operating income related to the small size of the first few cohorts.
2. Scholarship funds from the private sector, such as those represented here by the Cartu scholarship funds, to help attract students.

The SDSU-G program was originally conceived as a means to provide a US accredited STEM option for students in Georgia at a much lower cost than studying in the US, and as a means to build capacity within Georgian public universities. It is clear that recruiting efforts so far have not yielded a the large cohorts of students who cannot *quite* afford to study outside Georgia but are still interested in degrees in STEM, as expected. Interest from potential students is quite high, as evidenced by the large numbers of students expressing interest and entering into discussions with SDSU during the recruiting phase for the second cohort. However, ability and/or willingness to pay the full tuition level remains a significant barrier. This is why the private sector scholarship funds are so critical.

As stated previously, we believe that this will change over time. As students graduate and enter the workforce, they will demonstrate higher earning capacity. This will provide additional differentiation in discussions with prospective students, and also provide additional data for the development of more favorable student loan packages. Further, economic conditions can be expected to continue to improve. Taken together, these factors should make the recruiting process much easier. Additional private sector funding to support scholarships in the out years should also be easier to develop once the student product is better understood by employers.

This document must be considered a living document, and can be updated as recruitment evolves and other conditions become more clear. The model points out the critical nature of several factors that must be a strong focus for the next year:

- Recruiting efforts, both domestically within Georgia and internationally, because the model is strongly dependent on student numbers (especially as MCC funds phase out).
- Fundraising efforts for developing private sector support for scholarships, because the critical barrier to student interest seems to be the cost of attendance.
- Cost management efforts, because lowering of the cost basis helps to hold down the total number of students that must be enrolled to reach a sustainable level.

Appendix 1 – Budget Summary, 2-cohort model, current MoU funding structure

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SDSU-Georgia STEM Degree Program Operations -- Executive Summary

2-Cohort Model

Revenue	CY2 AY 2015/16	CY3 AY 2016/17	CY4 AY 2017/18	CY5 AY 2018/19	CY6 AY 2019/20	CY7 AY 2020/21	CY8 AY2021/22	CY9 AY2022/23	CY10 AY2023/24	Totals	
Georgian Tuition (net)	$ 597,176	$ 1,413,396	$ 1,309,251	$ 1,212,545	$ 659,990	$ -	$ -	$ -	$ -	**$ 5,192,359**	Tuition X GEO Student enrollment less "SDSU_ Scholarships"
Int'l Tuition (net)	$ 20,250	$ 148,500	$ 148,500	$ 148,500	$ 121,500	$ -	$ -	$ -	$ -	**$ 587,250**	Tuition X Int'l student enrollment less "SDSU_Scholarships"
GRDF	$ 650,000	$ 1,490,063	$ 1,490,063	$ 1,490,063	$ 840,063	$ -	$ -	$ -	$ -	**$ 5,960,250**	GRDF allocations for scholarships and Student Support Services
GoG Lump Sum	$ 78,760	$ 184,745	$ 171,132	$ 158,492	$ 84,594	$ -	$ -	$ -	$ -	**$ 677,723**	Assumes 2250 Gel for each Geogian student (NAEC and Other) X Exchange rate
Gog Lump Sum (supplemental)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**	Assumes GoG provides funding for Full Scholarships for Cohorts 3 thru 6
MCC Operational Funding	$ 2,441,345	$ 1,461,835	$ 1,352,300	$ 941,791	$ -	$ -	$ -	$ -	$ -	**$ 6,197,271**	MCC Funding ends as of July 26, 2019; yearly amounts changed??
Total	**$ 3,787,531**	**$ 4,698,539**	**$ 4,471,246**	**$ 3,951,391**	**$ 1,706,146**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 18,614,853**	
Expenses											
Revenue (adjustments)	$ 599,074	$ 1,233,154	$ 1,134,575	$ 1,043,875	$ 526,405	$ -	$ -	$ -	$ -	**$ 4,537,081**	Amounts adjusted for Merit Scholarship and attrition
Personnel Compensation	$ 1,645,544	$ 2,072,465	$ 2,018,566	$ 2,069,788	$ 1,732,546	$ -	$ -	$ -	$ -	**$ 9,538,909**	Faculty, Administrative, Management staff
Personnel Allowances	$ 142,942	$ 114,718	$ 116,529	$ 152,608	$ 143,374	$ -	$ -	$ -	$ -	**$ 670,171**	Relocation, housing, dependent schooling, home leave, etc.
Travel	$ 242,478	$ 254,679	$ 192,843	$ 297,664	$ 211,999	$ -	$ -	$ -	$ -	**$ 1,199,662**	Administrative, faculty, recruiting, etc.
General Operations	$ 40,800	$ 48,960	$ 49,939	$ 50,189	$ 51,957	$ -	$ -	$ -	$ -	**$ 241,845**	Supplies, materials, communications, etc.
Chemistry Lab Resupply	$ 2,562	$ 13,309	$ 42,723	$ 54,518	$ 19,400	$ -	$ -	$ -	$ -	**$ 132,512**	New expense line item added for resupply of Chem labs, all labs not included
Student Support Programs	$ 195,020	$ 220,650	$ 111,760	$ 103,505	$ 55,245	$ -	$ -	$ -	$ -	**$ 686,180**	English and Stem Academies; Student Support Services, interns, books, etc.
Student Recruitment	$ 243,976	$ 253,856	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 497,832**	CIE Contract, $1000 fee per int'l student, Marketing Materials/activities
Capacity Building	$ 157,344	$ 160,491	$ 163,701	$ 166,975	$ 106,446	$ -	$ -	$ -	$ -	**$ 754,957**	Geo Partner faculty training and travel
Contract Services	$ 99,000	$ 327,780	$ 328,576	$ 233,387	$ 186,215	$ -	$ -	$ -	$ -	**$ 1,174,958**	HR Support (Grant Thornton) and Legal Services
Partner Allocations	$ 35,347	$ 93,724	$ 87,886	$ 82,465	$ 47,428	$ -	$ -	$ -	$ -	**$ 346,850**	Partner Tuition subsidy: 2250 GEL less MS per Co-enrolled Georgian, 2250 GEL per Co-enrolled Int'l, and 100 GEL/class/non-co-enrolled students
Administrative Fees	$ 160,531	$ 406,093	$ 379,015	$ 353,872	$ 203,187	$ -	$ -	$ -	$ -	**$ 1,502,698**	Per project proposal, 26% fee applied to net tutition versus standard 32.87%
Total	**$ 3,564,618**	**$ 5,199,877**	**$ 4,626,112**	**$ 4,608,845**	**$ 3,284,202**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 21,283,653**	
Revenue - Expenses	**$222,913**	**($501,338)**	**($154,865)**	**($657,454)**	**($1,578,056)**	**$0**	**$0**	**$0**	**$0**	**($2,668,801)**	

Sustainable Enrollment (TBD)	CY2	CY3	CY4	CY5	CY6	CY7	CY8	CY9	CY10
Georgian Students	81	110	0	0	0	0	0	0	0
International students	3	10	0	0	0	0	0	0	0
Freshmen Total	**84**	**120**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Freshmen-Senior Cumulative		**203**	**189**	**176**	**97**	**0**	**0**	**0**	**0**

Gross Cost per Student	**$ 35,304**	**$ 19,541**	**$ 18,474**	**$ 20,256**	**$ 28,431**	**Includes all expenses -- partner subsidies, recruitment, capacity building, etc.**
Adjusted Cost per Student	**$ 25,691**	**$ 15,094**	**$ 15,144**	**$ 16,443**	**$ 23,029**	**Excludes Recruitment, capacity building, and 20% of Personnel and Travel**

Appendix 2 – Budget Summary, 2-cohort model, proposed revised MoU funding structure

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SDSU-Georgia STEM Degree Program Operations -- Executive Summary

2-Cohort Model

Revenue	CY2 AY 2015/16	CY3 AY 2016/17	CY4 AY 2017/18	CY5 AY 2018/19	CY6 AY 2019/20	CY7 AY 2020/21	CY8 AY2021/22	CY9 AY2022/23	CY10 AY2023/24	Totals	
Georgian Tuition (net)	$ 597,176	$ 1,413,396	$ 1,309,251	$ 1,212,545	$ 659,990	$ -	$ -	$ -	$ -	**$ 5,192,359**	Tuition X GEO Student enrollment less "SDSU_ Scholarships"
Int'l Tuition (net)	$ 20,250	$ 148,500	$ 148,500	$ 148,500	$ 121,500	$ -	$ -	$ -	$ -	**$ 587,250**	Tuition X Int'l student enrollment less "SDSU_Scholarships"
GRDF	$ 650,000	$ 1,490,063	$ 1,490,063	$ 1,490,063	$ 840,063	$ -	$ -	$ -	$ -	**$ 5,960,250**	GRDF allocations for scholarships and Student Support Services
GoG Lump Sum	$ 78,760	$ 184,745	$ 171,132	$ 158,492	$ 84,594	$ -	$ -	$ -	$ -	**$ 677,723**	Assumes 2250 Gel for each Geogian student (NAEC and Other) X Exchange rate
Gog Lump Sum (supplemental)	$ -	$ 787,597	$ 801,210	$ 813,850	$ 401,577	$ -	$ -	$ -	$ -	**$ 2,804,235**	Assumes GoG provides funding for Full Scholarships for Cohorts 3 thru 6
MCC Operational Funding	$ 2,441,345	$ 1,461,835	$ 1,352,300	$ 941,791	$ -	$ -	$ -	$ -	$ -	**$ 6,197,271**	MCC Funding ends as of July 26, 2019; yearly amounts changed??
Total	**$ 3,787,531**	**$ 5,486,136**	**$ 5,272,456**	**$ 4,765,241**	**$ 2,107,723**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 21,419,088**	
Expenses											
Revenue (adjustments)	$ 599,074	$ 1,233,154	$ 1,134,575	$ 1,043,875	$ 526,405	$ -	$ -	$ -	$ -	**$ 4,537,081**	Amounts adjusted for Merit Scholarship and attrition
Personnel Compensation	$ 1,645,544	$ 2,072,465	$ 2,018,566	$ 2,069,788	$ 1,732,546	$ -	$ -	$ -	$ -	**$ 9,538,909**	Faculty, Administrative, Management staff
Personnel Allowances	$ 142,942	$ 114,718	$ 116,529	$ 152,608	$ 143,374	$ -	$ -	$ -	$ -	**$ 670,171**	Relocation, housing, dependent schooling, home leave, etc.
Travel	$ 242,478	$ 254,679	$ 192,843	$ 297,664	$ 211,999	$ -	$ -	$ -	$ -	**$ 1,199,662**	Administrative, faculty, recruiting, etc.
General Operations	$ 40,800	$ 48,960	$ 49,939	$ 50,189	$ 51,957	$ -	$ -	$ -	$ -	**$ 241,845**	Supplies, materials, communications, etc.
Chemistry Lab Resupply	$ 2,562	$ 13,309	$ 42,723	$ 54,518	$ 19,400	$ -	$ -	$ -	$ -	**$ 132,512**	New expense line item added for resupply of Chem labs, all labs not included
Student Support Programs	$ 195,020	$ 220,650	$ 111,760	$ 103,505	$ 55,245	$ -	$ -	$ -	$ -	**$ 686,180**	English and Stem Academies; Student Support Services, interns, books, etc.
Student Recruitment	$ 243,976	$ 253,856	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 497,832**	CIE Contract, $1000 fee per int'l student, Marketing Materials/activities
Capacity Building	$ 157,344	$ 160,491	$ 163,701	$ 166,975	$ 106,446	$ -	$ -	$ -	$ -	**$ 754,957**	Geo Partner faculty training and travel
Contract Services	$ 99,000	$ 327,780	$ 328,576	$ 233,387	$ 186,215	$ -	$ -	$ -	$ -	**$ 1,174,958**	HR Support (Grant Thornton) and Legal Services
Partner Allocations	$ 35,347	$ 93,724	$ 87,886	$ 82,465	$ 47,428	$ -	$ -	$ -	$ -	**$ 346,850**	Partner Tuition subsidy: 2250 GEL less MS per Co-enrolled Georgian, 2250 GEL per Co-enrolled Int'l, and 100 GEL/class/non-co-enrolled students
Administrative Fees	$ 160,531	$ 406,093	$ 379,015	$ 353,872	$ 203,187	$ -	$ -	$ -	$ -	**$ 1,502,698**	Per project proposal, 26% fee applied to net tutition versus standard 32.87%
Total	**$ 3,564,618**	**$ 5,199,877**	**$ 4,626,112**	**$ 4,608,845**	**$ 3,284,202**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 21,283,653**	
Revenue - Expenses	**$222,913**	**$286,259**	**$646,345**	**$156,397**	**($1,176,479)**	**$0**	**$0**	**$0**	**$0**	**$135,435**	

Sustainable Enrollment (TBD)	CY2	CY3	CY4	CY5	CY6	CY7	CY8	CY9	CY10
Georgian Students	81	110	0	0	0	0	0	0	0
International students	3	10	0	0	0	0	0	0	0
Freshmen Total	**84**	**120**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Freshmen-Senior Cumulative		**203**	**189**	**176**	**97**	**0**	**0**	**0**	**0**

Gross Cost per Student	**$ 35,304**	**$ 19,541**	**$ 18,474**	**$ 20,256**	**$ 28,431**	**Includes all expenses -- partner subsidies, recruitment, capacity building, etc.**
Adjusted Cost per Student	**$ 25,691**	**$ 15,094**	**$ 15,144**	**$ 16,443**	**$ 23,029**	**Excludes Recruitment, capacity building, and 20% of Personnel and Travel**

Appendix 3 – Current funding period contract documents

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I. Goals and Purposes

The purpose of the STEM Higher Education Project of the Millennium Challenge Compact with Georgia is to:

i) Build capacity within Georgian public universities to deliver high quality STEM education; and,
ii) Deliver high-quality STEM bachelor degrees from accredited foreign institutions in Georgia as SDSU degree programs are gradually transferred to Georgian public university partners when the partner universities achieve US and International accreditation for their own STEM programs.

Generally, SDSU and SDSURF will perform several main activities to achieve the above goals: 1) administer and offer academic programs that are professionally (ABET, ACS) and regionally (WASC) accredited and internationally recognized 2) assist partner universities to achieve internationally-recognized accreditation for target degrees, 3) develop curricula and train Georgian faculty and 4) develop facilities that facilitate the SDSU-Georgia programs and 5) develop partnerships with industry. SDSU is responsible for design, development and delivery of the academic programs and required physical infrastructure while SDSURF will provide the fiscal, administrative and operational infrastructure to support these efforts.

The intent of the parties is to execute the general objectives of the Scope of Services over the 45-month performance period of the agreement, to be funded in one 12-month increment, one 8month increment and a 25-month increment. An 8-month increment will be initiated for the period from November 1, 2016-June 30, 2017. A periodic review will be conducted to enable the parties to incorporate lessons-learned and align the next 8-month period proposed resource allocation with program needs.

The following Scope of Services will be valid for the proposed Collaborative Agreement period with evaluation and modifications consistent with the program outlined in Section II below.

II. Elements of the Overall Program

The execution of the program will require secure and defined relationships between SDSU and MCA-Georgia, between SDSU and the partner institutions, between SDSU and the Government of Georgia (GoG), and among the partner institutions in Georgia. SDSU and GoG have already established the framework for collaboration under the executed Memorandum of Understanding dated July 15, 2015, which outlines the Purpose and Obligations of the Partners.

Tbilisi State University, Ilia State University, and Georgian Technical University are among the highest ranking universities in Georgia according to several world rankings of universities. These institutions have executed partner agreements that reflect the institutions' mutual commitment to develop courses and academic programs, joint scientific and technical research programs, exchanges of teaching and research personnel, student exchanges, and other mutually beneficial activities that enhance academic, research or technical progress at the universities.

The execution of the collaborative program will provide policy learning opportunities for Georgian partners regarding improved higher education quality and access through involvement with the project. Policy learning may include: long-term sustainability, development of improved enabling

environments for international and private higher education, STEM workforce development objectives, and educational access/achievement by women and socially vulnerable youth.

A. Academic Programs

During the first proposed 12-month funding period, SDSU has delivered three SDSU bachelor degrees in Georgia in partnership with its Georgian Partner Institutions. SDSU bachelor degree programs offered in Georgia must meet the standards of quality instruction, academic rigor and educational effectiveness of degree programs delivered at SDSU's home campus/university and required for professional and regional US accreditation.

The overall task under this agreement is to undertake all actions necessary to build infrastructure and deliver instruction in support of the following SDSU bachelor degree programs in Georgia, subject to student demand and participation:

- Chemistry (with an emphasis in Biochemistry)
- Computer Engineering, and
- Electrical Engineering
- And starting in 2016, Computer Science

Additional degree programs may be added based on mutual agreement by the partners during the subsequent 25 months of the agreement. These additions may include such programs as Civil Engineering, Construction Engineering, Biotechnology, Environmental Engineering, Bioengineering, and other high demand STEM degrees.

SDSU will ensure quality of instruction, academic rigor, and educational effectiveness by implementing the existing SDSU STEM curriculum with appropriate US accreditation (ABET, ACS, WASC or other as appropriate to the discipline) in collaboration with partner institution faculty. During this phase of the project, students will receive SDSU Bachelor of Sciences degrees, ensuring that the program rigor will be equivalent to that provided on the campus in San Diego to meet accreditation requirements.

SDSU plans to bring additional bachelor degree programs on the following tentative schedule. This schedule may be modified in response to student demand, with appropriate consultation with MCA-Georgia, as may the specific degree programs at specific partner universities.

- Civil Engineering to start no sooner than Fall 2017
- Construction Engineering to start no sooner than Fall 2017.

1. General Education Standards of Instruction

All ABET Foundation-evaluated programs in Georgia were found to need improvement in the criterion addressing "the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context". To directly address this requirement, and simultaneously ensure quality instruction, academic rigor, and educational effectiveness, the SDSU curriculum will include its rigorous General Education (GE) instruction corresponding to the accredited curricula of SDSU. Many of the GE courses will be initially co-taught by instructors from SDSU and the partner institution to facilitate the approval of partner institution faculty as adjunct faculty at SDSU and to give Georgian faculty the opportunity to enhance their GE instructional skills

to meet accreditation requirements. The SDSU GE curriculum content consists of specific courses and the sequencing will be established and maintained for Georgian students to facilitate progress to degree. The distribution within the SDSU GE program is subject to change, but as of this writing consists of:

1) Communication and Critical Thinking (9 units)
2) Foundations of Learning (29 units, lower division)
    A. Natural Sciences and Quantitative Reasoning (including physical sciences, life sciences, laboratory, and mathematics/quantitative reasoning)
    B. Social and Behavioral Sciences
    C. Humanities (including literature and foreign languages)
3) American Institutions (3 units)
4) Explorations of Human Experience (9 units, upper division)
    A. Natural Sciences
    B. Social and Behavioral Sciences
    C. Humanities

2. Accreditation of Georgian Programs

The core methodology of the Collaborative Agreement to facilitate the accreditation of the partner institutions is to overlay SDSU's existing, and accredited, curricula onto the framework already provided by the partner institution. Under preliminary evaluation by the ABET Foundation, Georgian degree programs presently exhibit: 1) A lack of consistent assessment of student learning; 2) a lack of sufficient General Education; 3) a lack of modern teaching and laboratory equipment in many discipline areas.

SDSU maintains accreditation in all the proposed degrees and is an active partner with ABET and ACS (the two accrediting organizations relevant to the first proposed degrees) in a process of continuous improvement not only to maintain accreditation, but also to improve student learning and student capacity to enter the job market in their chosen fields.

In all cases, learning assessments will be applied that are consistent with accreditation requirements and consist of an appropriate mix of direct and indirect assessments, with appropriate measurement tools. For example, direct assessment includes homework, examinations, class discussion and projects. Indirect Assessment includes qualitative student surveys that assist in adjusting the pace and focus of class lectures and homework, ensuring adequate progress and full compliance in learning outcomes for the students.

ABET accreditation requires consideration of the programs according to several criteria, which have been specifically targeted by the proposed curricula, including:

1. Students – the qualifications of the students that are accepted and the monitoring of their performance against graduation requirements.
2. Program Educational Objectives – the mission of the program and its consistency with the institution's mission, and the achievement of these objectives. This criterion requires a working relationship with industry and an Industry Advisory Board in order to establish objectives and to assess the degree to which graduates achieve them in practice after graduation.
3. Program Outcomes – program outcomes must be established to achieve the program's educational objectives, and performance must be assessed against them. This assessment is made via metrics that are established with both direct and indirect assessments. Culminating experiences are also incorporated in the assessment strategy.

4. Continuous Improvement – metrics must be monitored over time and used to improve the curriculum in general.
5. Curriculum – program curriculum is defined to achieve the program outcomes, and the details of this connection must be established and maintained.
6. Faculty – the, qualifications, size and the composition of the faculty to meet the needs of the curriculum.
7. Facilities – the physical resources (classrooms, labs, offices) available to support the needs of the program.
8. Support – financial resources to allow faculty development and support services of the Departments providing these programs.

Accreditation at SDSU is an institutional priority with management responsibilities falling directly with the chairs of the relevant departments, overseen by the Deans of the colleges, and, ultimately, by the Provost of the university.

At least every six years, programs submit a self-study document detailing the performance of the program against the criteria stated above. Subsequently, a visit is organized by ABET with a team of independent evaluators who make their own assessment of the accuracy of the self-study and make a recommendation for continued accreditation. The self-studies must include evidence of monitoring against all these criteria throughout the intervening period.

The projection is that by the time the partner institution programs are eligible for consideration (e.g., have at least one graduate), nearly all of the first group of SDSU-Georgia programs will be transitioned to partner-institution instruction only, and thereby be qualified to be submitted under a Request for Evaluation (RFE). It is projected that some programs may be potentially eligible and prepared to submit the RFE as soon as the end of CY5. Hence, by 2020 these programs should be in the process of applying or approaching being ready to apply for ABET or ACS accreditation. Some programs may require a longer transition period depending on the speed of capacity building within that program.

The proposal describes a path to accreditation for programs at Georgian partner universities in which the SDSU curriculum is mapped to their institutions. As the faculty at the partner universities build competence in teaching in the SDSU ABET accredited curriculum, they would adapt SDSU's processes, develop accreditation self-studies, and submit for accreditation as students graduate from their programs.

An alternative model that could be considered is introducing a second "track" towards ABET accreditation with an aim to provide two channels for ABET accreditation for patner universities As a "second track" option, SDSU-Georgia is advising partner universities on how to obtain ABET accreditation for a few of their existing Georgian language engineering programs, where they already have a number of graduates working in the industry. SDSU Georgia has done preliminary assessment of this idea during the CY2, AY2015-16, and determined that it may be possible to complete ABET Readiness Reports for the pilot programs by CY5, AY 2018-19, and potentially complete ABET accreditation for pilot Georgian language programs in the AY 2020-21. This may become a desirable approach, and would be negotiated with MCA-Georgia depending on other factors, including budget developments.

In accordance with and subject to applicable law and accreditation requirements and as memorialized in the application for WASC accreditation (including those laws and accreditation policies applicable to Consultant), for each cohort enrolled the Consultant will provide students the opportunity to

complete their educational programs, including, as appropriate, an orderly transition for students who elect to transfer to other locations or other higher edu cation institutions.

B. Renovation and Outfitting Activities

SDSU's responsibilities under this task are as follows:

- Support MCA-Georgia in managing and implementing the facilities development activities related to the 45-Month agreement; and implementing and developing, as necessary, systems and structures that facilitate clear reporting lines, high levels of accountability and transparency, effective communication, and timely professional decision-making;
- Serve as the Construction Renovation Manager for MCC-funded contract(s) for the renovation and outfitting activities under the Collaborative Agreement, and ensure project quality as further defined below, in full consultation with MCA-Georgia and as limited by this scope of services defined by this agreement.
- Oversee operations and maintanence of MCC-funded facilities in cooperation with partner universities.

For any renovation and construction works to be carried out under the project, SDSU will prepare designs and carry out supervision of works and provide acceptance of handover certificates for the works when/if procured by MCA-Georgia. Additional requirements related to infrastructure development can be found in Appendix E of this agreement.

SDSU shall perform the tasks as the Project Manager responsible for the project management, site investigations, designs, environmental and social assessment, and construction management, and construction supervision services to: a) achieve anticipated Project physical outputs in accordance with standards and requirements of high quality, in a timely and cost effective manner, and in a way that contributes effectively to the overall Program objectives; b) document and analyze issues that arise and recommend to MCA-Georgia remedial actions to be taken in the case of implementation delays, cost overruns, poor quality of the deliverables, and other problems; c) attempt to avoid, minimize, and mitigate risks and achieve appropriate results; d) assist MCA-Georgia in efficient utilization of Project funds in line with requirements of the Compact; e) review, accept and certify the accuracy of payment certificates submitted by the Construction Contractor under this Project and submit these certificates for approval and payment to MCA-Georgia.

1. Develop Renovation/Outfitting Bid Packages

SDSU-Georgia shall prepare detailed engineering designs drawings/plans, technical specifications and performance requirements for all the renovation and outfitting works necessary to achieve accreditation of the programs outlined in Section IIA. SDSU-Georgia shall prepare Bills of Quantities (BOQ) for all the renovation and outfitting works based on the various items of work to be executed in accordance with the drawings and the technical specifications. The items in the BOQ shall correspond to the work (pay) items specified in the technical specifications.

These documents shall be used as a basis to establish the MCC Standard Bidding Documents for the renovation and outfitting works. SDSU-Georgia shall assist MCA-Georgia and the Procurement Unit at MCA-Georgia in the elaboration of documents pertaining to invitations for bid and shall also provide any other required information or documents. These documents shall contain references to the ESMP in accordance to IFC Performance Standards, which shall be provided to the bidders. All plans, designs and documents that are provided must include one electronic copy in order to be reproduced.

SDSU shall develop a Confidential Cost Estimate, for each work item, work category and contract package as a whole. Unit prices shall be classified into direct costs (labor, materials and equipment), indirect costs (mobilization, on-site and general overheads, contractor's contingencies and profit) and taxes.

In preparing cost estimates SDSU shall take into account restrictions on the use of Compact funds. This includes the procurement of equipment, supplies, personnel or other inputs from any country that is subject to sanction or restriction by United States law or policy.

2. Environmental and Social Management

SDSU-Georgia shall identify and assess environmental and social risks associated with programmatic activities and adopt, revise, and implement environmental and social management plans, satisfactory to MCA-Georgia and MCC and in compliance with IFC Performance Standards, that include but are not limited to: lab operations and safety manuals; emergency preparedness and response plans; facilities waste management plans; resource efficiency plans that identify opportunities to enhance efficiency in use of energy, water and other resources; and human resources policies to protect workers and promote safe working conditions. It is expected that in their programs in Georgia, SDSU will use their current practices and policies, and where necessary adapt such practices and policies to the local context, and to comply with the IFC Performance Standards. SDSU will report on the implementation of the plan in quarterly reports to MCA-Georgia. In addition, within 24 hours following any environmental incident or any event affecting the health and safety of a student, teacher or any other person, SDSU-Georgia shall prepare and submit an incident report to MCA-Georgia, indicating both the nature of the incident and the actions taken in response to the incident.

C. Equipment Purchases

SDSURF will acquire all necessary office, academic, and laboratory equipment and supplies necessary for administrative management and operation of academic programs. This includes all necessary furnishings, equipment and supplies. SDSURF will retain responsibility for required equipment purchases using applicable and relevant purchasing policies as outlined in the SDSURF Purchasing Policy.

The duties of purchasing will be to organize and administer the procurement of equipment, materials, supplies and services for the Collaborativee Agreement.

The policies and procedures are in accordance with the requirements of the state of California laws, general SDSU Research Foundation guidelines, good business practice, and requirements for special programs.

SDSURF will procure only those items that are required to perform the scope of services described herein and/or fill a bona fide need of this program. Procurements will be made with impartiality based strictly on the merits of supplier proposals and applicable related considerations such as delivery, quantity, etc. All SDSURF staff with designated purchasing authority adheres to the following objectives:

- Assist staff in acquiring supplies, equipment and services, and obtain the maximum value of each dollar of expenditure
- Obtain quality supplies/services needed for delivery at the time and place required
- Buy from responsible sources of supplies
- Obtain maximum value for all expenditures
- Deal fairly and impartially with all suppliers

- Maintain dependable sources of supply
- Grant all competitive bidders equal consideration, regard each transaction on its own merits; and promote fair, ethical, and legal trade practices
- Document each transaction as required by SDSURF and funding agency requirements
- Be above suspicion of unethical behavior at all times; avoid any conflict of interest in all SDSURF/supplier relationships.

D. Administration

Key to successful accomplishment of the Program objectives and requirements of the Collaborative Agreement will be the performance of the Administration team and supporting members. Accordingly, the Program will be managed as a collaborative partnership with programmatic and operational directionfrom the Operations Committee; academic, scientific and and operational oversight from the Executive Committee; strategic guidance and resource support services from the External Advisory Board; and selected activity and processes support from stakeholders, and other service providers.

The primary purpose is to maintain the operations of the academic and programmatic management team, program office, and administrative and operational programs and processes required to achieve the objectives of the STEM Higher Education Project consistent with the projected terms of the Collaborative Agreement. The costs associated with the administration will be covered as part of the Collaborative Agreement for the funding period covered under this scope of services. An assessment will be made at the end of each funding period to determine when costs will transition from the MCC-Investment funding to the operating budget (supported by tuition, GoG, and GRDF funds) depending on projected enrollment numbers and sustainability of the operating budget to absorb these costs.

Program Administration services will include administration of the program including all aspects of academic, financial and operational oversight, periodic assessments, accreditation processes and procedures, recruitment and public relations, reporting of metrics versus plans, and applying lessons learned. Reporting on the activities for this task will be included in the reports, as directed by the agreement language and as listed in Appendix B.

1. Maintain Business Unit and Management Structures

SDSU shall maintain a resident Dean in Tbilisi throughout the period of performance with additional management, support staff, and professional consultants selected in accordance with the approved SDSU and SDSURF employment and procurement policies to implement the services designated in this agreement in a timely manner. Additional senior staff shall be engaged to coordinate the performance of key functions such as faculty and student affairs, facility administration, physical infrastructureand other program operations as needed. SDSU shall maintain an administrative model that includes central, in-country management for elements that impact the entire program as well as coordination with academic leadership at each of the partner institution campuses. Program personnel shall be an appropriate combination of US-based and Georgian staff that will be responsible for the administration and efficient conduct of the educational program, for achieving program capacity that meets goals, and for integrating the plans of the program with those of SDSU. Additional support staff, both academic and administrative, shall be assigned as needed at the main campus in San Diego, California.

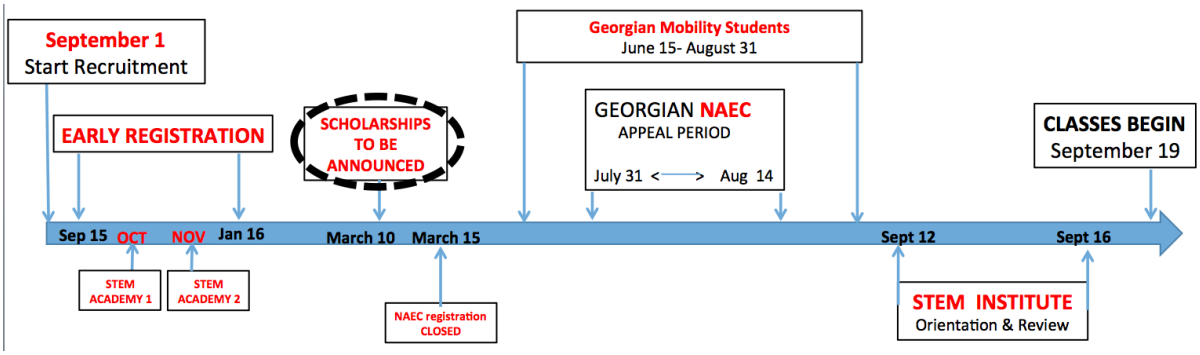
Program personnel shall have primary responsibility for representing the requirements of SDSU faculty for the program to all groups and persons external to SDSU, particularly to the Government of Georgia, institutional partners, MCA-Georgia, MCC, and industry representatives. SDSU shall

maintain an advisory board, consisting of at least one representative from each of the program's principal university partners, the Millennium Challenge Account-Georgia and industry representatives. The Board shall include members with expertise in social and gender equity issues. The advisory board shall advise the Dean on matters of curriculum, internships and workforce needs, student recruiting and demand, social and gender equity issues, self-support programming, and philanthropy.

2. Plan and Execute Student Recruitment

SDSU shall provide the opportunity for Georgian students to enroll in the SDSU programs in Georgia, along with an opportunity to take English language evaluation and potentially improve English capability in anticipation of being admitted to and enrolling in the SDSU degree program. The primary enrollment strategy for degree programs shall be the national enrollment system of the Government of Georgia. Recruitment and admissions shall be managed centrally in the Dean's office via staff reporting to the Dean and supported by staff in coordination with the partner institutions. SDSU shall also maintain an outreach and recruitment program during the period of performance to include provision of SDSU program marketing and outreach materials. This program shall involve targeted recruitment at both public and private Georgian secondary education institutions, placement tests (such as for English, chemistry, and mathematics), and special support programs including faculty and peer advising. Existing student recruitment organizations, both inside the partner institutions and broadly in the Georgian Community, shall be leveraged for access to a larger student audience and to assist with designing effective outreach to women and socially disadvantaged and/or disabled students. The program shall emphasize culturally sensitive services and will seek advice from partner universities. Events that explicitly target under-represented groups, including women, will be conducted. SDSU will report on key performance indicators, including actual performance on indicators of student recruitment, test scores as well as basic demographic information about students accepted to SDSU degree programs.

An updated recruitment plan for the 2016-2017 academic year is described below and the timeline shown in the following figure:



On an annual basis SDSU-Georgia will:

Review and analyze outcomes of prior year's recruitment efforts and activities designed to meet the recruitment goals, and develop a detailed work plan including a timetable and budget for recruiting of the subsequent cohort of students. Recruiting and retaining STEM students from social support students, fee-paying students including Georgian private high school students (including International Baccalaureate), Georgian public high schools students, international students, mobility students and

scholarship students (merit and needs based); attention will be directed to recruitment and retention strategies appropriate to recruiting females to STEM programs, both locally and internationally. The strategy is focused on identifying and developing explicit messages for different audiences.

Recruitment approaches will include:

1. Regional recruiting & English Language Academy services for high school seniors, STEM Academy for high school seniors, English Language Support Center, STEM Institute for entering students, National Exam Preparation Center for Social Support Students, SDSU-Georgia website, print, broadcast and social media, and student life activities.

2. Extensive advertising strategies and participation in community events to raise awareness and interest in SDSU-Georgia.

3.

4. This recruitment strategy and tools will also be implemented for the third cohort, except the ApplySDSU early application process will begin on the first day high schools start (September 15) and continue until January 16. Academically qualified prospective students will be conditionally admitted to SDSU-Georgia by January 31, 2017. During the month of February, SDSU-Georgia will invite conditionally admitted prospective students for interviews, and based on interviews make financial aid decisions and offers to qualified students. Prospective students will have financial aid offers before the NAEC registration deadline (March 15, 2017). Prospective students will be required to rank SDSU-Georgia as #1 in their NAEC registration. After the NAEC registration deadline, we will be able to get data on how many students ranked SDSU-Georgia as their top choice.

5. SDSU-Georgia is also focused on recruiting fee-paying international students to help subsidize the cost of Georgian students and also support the sustainability of SDSU-Georgia degree programs.

SDSU-Georgia will collaborate with MCA-Georgia in developing an updated detailed 2016-17 recruitment strategy to be delivered by the date indicated in Appendix B. The recruitment strategy shall be a living document, with a comprehensive review anticipated with MCA-Georgia prior to the start of the academic year for each program year.

3. Recruit and Train Faculty

Georgian faculty designated to teach an SDSU course or laboratory session will participate in an orientation session prior to the target course being offered in Georgia. These sessions may be conducted either during the summer or academic semester, depending upon the course.

SDSU will invite Georgian faculty to SDSU to observe and collaborate on course delivery, laboratory safety and delivery, accreditation requirements, and curriculum development, and to discuss any adjustments needed for the Georgian student population. Georgian faculty will be hosted at SDSU over an appropriate course period during an academic semester. During their time on the SDSU campus, Georgian partner institution faculty will also be able to meet with leaders of the San Diego biotechnology, cybertechnology, and other industries as well as participate in the SDSU entrepreneurship program. When not working on these training goals, the visiting faculty can

experience other aspects of the SDSU campus and San Diego environment, including student-life activities such as attending presentations, conferences, seminars, concerts and art events on campus, studying in the SDSU library, and working to develop research collaborations with SDSU faculty. Note that as the project develops it is anticipated that Georgian faculty who have participated in the training program in San Diego, will provide additional mentoring and training to colleagues in Georgia as a supplement to the San Diego based training program.

Faculty to participate in the development program are nominated by their universities (or may self-nominate). Their qualifications are reviewed by the Dean of SDSU-Georgia, who also conducts interviews with faculty candidates. Faculty are chosen based on the fit of their demonstrated interest in the program, the fit of their discipline to the curriculum needs of SDSU-Georgia programs, their ability in English, and their research activity.

Upon completion of this first phase of collaborative development, the partner institution faculty member will be eligible for an appointment as an adjunct SDSU faculty member, representing SDSU as a faculty member or lecturer. Selection for this appointment will be at the determination of the Dean and/ Program Head/Department Chair and will be dependent on course offerings and modality and demonstrated ability of the individual to teach the course(s) independently and/or in conjunction with SDSU faculty. SDSU adjunct faculty members will proceed to implement the agreed curriculum in their discipline of expertise with weekly contact/guest lecture facilitated between the Partner Institution faculty, students, and SDSU collaborating faculty member, or more frequently as needed.

a) Faculty Training Objectives – in Accordance with Accreditation Standards

- Understanding the curricula of the programs to be delivered through SDSU-Georgia
- Exposure to specific SDSU classes to eventually be taught by Georgian faculty
- Exposure to equipment and teaching methods in laboratories
- Training on assessment methods for conducting, analyzing, and documenting assessment of student learning for continuous improvement and accreditation purposes
- Training on methods SDSU uses to assess courses at other institutions for potential articulation
- Exposure to the research interests of SDSU faculty and complementary disciplines
- Training on systems for faculty self-governance at SDSU
- Exposure to university organizations like entrepreneurship and innovation groups used by the university and available to faculty.

b) Assessment

- SDSU will conduct a post-assessment in San Diego
- SDSU-Georgia will conduct a post-assessment in Tbilisi

c) Training Deliverables

- Presentation in Tbilisi regarding the experience at SDSU
- Course syllabus, description, assignments, final exam and assessment materials for a current course at the partner institution (numbered 299 or lower), translated into English
- 30-minute presentation (in English) on research interests
- Delivery of a guest lecture in an SDSU course
- Lead one laboratory session using SDSU equipment

4. Build Relationships with Industry

Successful workforce development activities in the STEM arena require that students have academic experiences that build their abilities within their chosen professions, and then subsequently find

employment upon graduation within those professions. To that end, SDSU will promote partnerships with industry and will work to educate employers about the value of the accreditation process and its relationship to the expected performance of graduates from these accredited programs. The Industry Advisory Board will serve as one vehicle for such communication, and for suggesting other avenues and strategies. Industry engagement can include but not be limited to internships, development of career pathways for graduates, mentorships, post-graduation training programs, and advice on matters of curriculum development.

SDSU will collaborate with MCA-Georgia in developing a planned approach to support fund-raising for scholarships and partnerships with industry to enhance employability of SDSU-Georgia students. Fundamentally, SDSU-Georgia dean and vice dean will serve the primary role in developing public-private partnerships. During the 2017-2018 negotiations to amend this agreement, SDSU will evaluate whether the donations generated justifies additional staff in this role.

A joint committee including MCA-Georgia, MCC, SDSU-Georgia, and other representatives as appropriate will collaborate on building public-private partnerships with industry including generation of philanthropic donations to support SDSU-Georgia educational programs. This committee will develop a plan for fundraising that includes the identification of potential donors, developing materials that describe philanthropic opportunities for SDSU-Georgia, cultivation of potential donors, solicitation of potential donors, and stewardship of donors. The committee members will then implement this plan. The committee is expected to provide a written report on the plans, process, and outcomes to stakeholders on at least a bimonthly basis. The committee members will have shared responsibilities and expectations for the development, implementation, and reporting of philanthropic activities. The Dean of SDSU-Georgia will coordinate activities and serve as Chair of the committee.

III. Revenue Sources

A. MCC Collaborative Agreement Funding

Use of the investment funds for the period November 1, 2016 – June 30, 2017, and the prospective following 25 months of performance, is outlined in the table below. In particular, strict adherence to good accounting practices was implemented to ensure that one-time investment funds will primarily be used for one-time development or facilities, and on-going costs have been matched to long-term operational revenue from tuition. The balance of investment vs. operating revenues is critical for the continued sustainment and growth of the program. The details of the MCC Collaborative Agreement Funding are supported in the following proposed budget, which includes expenditures for Faculty Development and Operations (staffing, faculty capacity building, recruitment, travel, and operating costs.) Lab and Instructional Equipment and Furnishings (Equipment, lab and instructional supplies, classroom and laboratory furnishings), and Construction/Renovations Management (contracted services for the design and supervision of construction and renovation of labs and instructional spaces). Through the current 8-month funding period, this budget reallocates funds from outfitting of a building at Ilia State University into Faculty Development and Operations. This budget also reallocates a portion of the Furnishing and Equipment budgets for the labs into the 25-month pro-forma budget. In the event that additional resources are identified through donations, additional lump sum supplements from the Government of Georgia or other mechanisms, SDSU and MCA-Georgia will jointly determine if funding can be reallocated to support re-establishment of funding for this building and equipment..

Category	12 Months Oct 30 2015- Oct 31 2016	8Month Proposed Expenditures Nov 1 2016- June 30 2017	25-Month Pro-Forma Balance	Total
SDSU-Georgia				
Faculty Development and Operations	$3,134,482	$2,186,640	$5,783,041	**$11,086,163**
Lab and Instructional Equipment and Furnishings	$2,425,161	$1,458,624	$3,889,665	$7,773,450
Construction/Renovation Mgmt	$178,242	$28,227	$75,273	**$281,742**
Subtotal SDSU-Georgia	$5,737,885	$3,655,491	$10,656,285	**$19,141,355**
MCA-Georgia				
Renovation in Partner Universities	$160,706	$70,000	$71,078	**$301,784**
Subtotal MCA-Georgia	**$160,706**	**$70,000**	**$71,078**	**$301,784**
Total	$5,898,591	$3,725,491	$10,727,363	$19,443,139

Category	12 Months Oct 30 2015-Oct 31 2016	8-Month Proposed Expenditures Oct 27 2016-June 30 2017	25-Month Pro-Forma Balance	Total
SDSU-Georgia				
Faculty Development and Operations	$3,134,482	$2,816,842	$5,042,156,186,252	**$12,137,576**
Lab and Instructional Equipment and Furnishings	$2,425,162	$1,706,972	$2,571,077	$6,703,211
Construction/Renovation Mgmt	$178,242	$122,326	$0	**$300,568**
Subtotal SDSU-Georgia	**$5,737,886**	**$4,646,140**	**$8,757,329**	**$19,141,355**
MCA-Georgia				
Renovation in Partner Universities	$160,706	$141,078	$0	**$301,784**
Subtotal MCA-Georgia	**$160,706**	**$141,078**	**$0**	**$301,784**
Total	**$5,898,592**	**$4,787,218**	**$8,757,329**	**$19,443.139**

B. GRDF Funds

As part of the original MCC and GOG request for respondents, the sponsors considered investing proceeds from the GRDF to support financial aid programs for students. In particular, the SDSU-Georgia proposed investment plan focuses on strategic investment of an initial GRDF allocation of $2.6 million to support scholarships, recruitment, and preparation of Georgian students for enrollment in an SDSU STEM degree program beginning in Compact Year 2, AY 2015/2016, and continuing through Compact Year 5 (AY 2018/2019). An additional $3,360,500 GRDF funds will be provided to support scholarships, the English Language Academy, STEM Institute, recruitment and student life activities (inclusive of the cost of providing textbooks for students) beginning in Compact Year 3, AY 2016-17, and continuing through AY 2019-20. GRDF funds will be used consistently with the plans outlined here and in accordance with the separate agreement concluded between MCA Georgia and SDSU on the use of GRDF funds.

The proposed GRDF Investment strategy focuses on providing opportunities and services most highly valued by students in general, with special attention on the needs of the underrepresented or socially-disadvantaged groups.

In particular, the core investment strategy for GRDF funds will be to deploy the funds in a flexible and strategic fashion to directly improve student outcomes. GRDF investments will be primarily made for scholarships for the students enrolled in SDSU programs. Additional GRDF proceeds shall be expended in three areas, elaborated below and based on the immediate and on-the- ground needs of the students contingent upon approval by MCC and MCA-Georgia: English Language Academy/English Language Support Center, STEM academy, student life activities (inclusive of textbooks for students)s.

A detailed plan for specific usage on an annual basis will be provided as specified in Appendix B. Specific details regarding GRDF funds and criteria for use shall be covered under a separate agreement between SDSU and MCA-Georgia.

C. Lump-sum Payments

An MOU exists between SDSU and the Government of Georgia which defines the Government of Georgia's contributions to the SDSU-Georgia program.

D. Tuition revenue from enrolled students

Tuition reflects input from the Technical Evaluation Panel that selected SDSU for the delivery of the higher education project in Georgia based upon their in-country market evaluation. Of primary importance is to maintain a tuition cost that both allows for broad access and ensures long-term sustainability of the program. In recognition of the requirement to provide broad access, and responsive to the comments of the partner institutions, the proposed tuition has been set at $7,500 for Georgian students. This tuition represents a competitive rate for regional private institutions, many of which do not provide professionally accredited degrees. The value of the professional accredited degree – allowing for recognition of educational accomplishment internationally – is deemed of sufficient worth to warrant this tuition. In addition these funds are required to hedge against unforeseen contingencies, and be leveraged for the long-term investment strategy beyond the life of the Compact. Finally, SDSU typically charges additional fees for student life, library access, and supplies needed for the laboratory intensive degrees and courses proposed. Under the Collaborative Agreement, all student fees are incorporated into the proposed tuition, with services comparable to those available to on-campus students at SDSU.

IV. Degree Delivery

A. Degrees to be Delivered

This Collaborative Agreement will facilitate the delivery of (1) Electrical Engineering, (2) Computer Engineering, and (3) Chemistry with an Emphasis in Biochemistry programs in Fall 2015 and (4) Computer Science programs in Fall 2016. SDSU will ensure quality of instruction, academic rigor, and educational effectiveness by implementing the existing ABET/ACS accredited SDSU STEM curriculum in collaboration with partner institution faculty. Students will receive SDSU Bachelor of Sciences degrees, ensuring that the program rigor will be equivalent to that provided on the campus in San Diego.

SDSU plans to bring additional bachelor degree programs on the following tentative schedule. This schedule may be modified in response to student demand, with appropriate agreement with MCA-Georgia, as may the specific degree programs at specific partner universities.

- Civil Engineering to start no sooner than Fall 2017.
- Construction Engineering to start no sooner than Fall 2017.

B. Projected Resource Requirements

Laboratories are integral to the STEM education experience. The following table indicates the anticipated breakdown of laboratories to be constructed or renovated for the different major degree programs over the full 45-month period.

Major Degree Program		
Chemistry	**Electrical/Computer Engineering and Computer Science**	**Civil and Construction Engineering ***
General Chemistry Laboratory for Courses Chemistry 100/200/251/Env. Engineering	Circuits Laboratory for Courses EE210, 330L, 430L	Surveying Laboratory for Course CIV E 218
Analytical Chemistry Laboratory for Courses Chemistry 417 /427/457	Digital Systems Laboratory for Courses CompE 270, 375, 470L	Hydraulics Laboratory for Courses CIV E 444 and 530
Organic Chemistry Laboratory for Courses Chemistry 232/432	Digital Communications Laboratory for Course EE 458L	Geotechnical Laboratory for Course CIV E 463
Special Equipment Laboratory for Courses Chemistry 251/457	Power Electronics Laboratory for Elective Course EE 484L *	Structural Laboratory for Course CIV E 302
Biochemistry Laboratory for Course Chemistry 567	Antenna Microwave Laboratory for Elective Course EE 540L*	Laboratory Technician Office
Sciences Computer Classroom	Engineering Computer Laboratories	
Laboratory Storerooms	Senior Design Laboratory for Courses EE 490/COMPE 490	
Chemistry Laboratory Technician Offices	Laboratory Technician Office	
*Conditional on available funding		

C. Bridging and Support Programs

A key objective of SDSU-Georgia is providing opportunity for students, including those from socially vulnerable groups, to enroll in and successfully earn an undergraduate SDSU STEM degree. To this end, students must have a reasonable facility in speaking, writing, reading, and comprehending English language to be successful at SDSU-Georgia where all courses will be taught in English and will use textbooks written in English. Accordingly, an intensive English Language Academy/Support Center (ELA/ELSC) has been developed to provide remediation, supplemental support, and general English education in preparation for enrollment and successful learning in a SDSU degree program.

A STEM Institute was implemented in mid-2015-16 academic year to include assessments in mathematics and selected sciences to determine need for preparatory education in the sciences and mathematics in preparation for enrollment in a STEM degree program. Appropriate courses continue to be tailored to meet student needs and qualified instructors are engaged to provide preparatory STEM courses.

Academic support, advising and student mentors have all been specifically contemplated under the project budget. These programs are common and popular with students at SDSU, and will be implemented with shared governance between the university and program administration and the students. Note that accreditation requirements dictate that students receive appropriate advising to advance toward their degrees, and reporting on this element will also be required for accreditation submissions.

Retention programs, including academic advising and mentorship, internship and career support services, student organizations and student life programs, with particular attention to the particular needs of student communities including women and socially vulnerable students.

The bridging activities referenced are intended to be funded through use of GRDF funds through CY5.

D. Partner Agreements

SDSU and SDSURF will enter into appropriate partner agreements with the identified partner institutions to share agreed upon services and facilities that are important to full achievement of the goals. The partner agreements will be contracts among the parties outlining specific actions for each organization. The general objectives of the partner agreements will be consistent with the objectives of this Collaborative Agreement: (1) providing qualitative and quantifiable improvement of human capital in the Georgian STEM labor workforce, including the recruitment, education and training of traditionally under-represented student groups, (2) developing a robust STEM workforce to supply high quality professionals for companies operating in Georgia, (3) enhancing economic growth in Georgia, (4) increasing employment in companies requiring market-driven technical skills, (5) establishing appropriate private-public-academic sector relationships to ensure long-term sustainability of the program.

The partner agreements may stipulate performance on elements such as: Administrative support and responsibilities; Space renovation and construction; Space access; Utilities and maintenance; Accreditation support; Articulation of classes for accredited degree offerings; Student recruiting; Student mobility; Faculty rights and responsibilities; Restricted activities; Student status; Data sharing; Payments; Board participation; Compliance; Dispute resolution; and other standard contracting clauses.

V. Build Capacity

The Georgian partner institutions have established the academic framework to offer bachelor's degrees in STEM disciplines. To extend the existing framework to meet the requirements of the relevant US-accredited degree programs with the rigorous instruction and assessment needed (such as for ABET/ACS accreditation), the Project contemplates deploying SDSU degrees as outlined in IIA, and using this effort as a springboard to develop capacity for the partner institutions to develop their own US and Internationally accredited programs as outlined in IIA2.

A. Accreditation Strategy

The core methodology of the Collaborative Agreement to facilitate the accreditation of the partner institutions is to overlay SDSU's existing, and accredited, curriculum onto the strong framework already provided by the partner institution. This strategy was selected because it allows for a streamlined curricular development process, takes advantage of the existing capabilities and core competencies of the partner institutions, while also building new capacity, and leads ultimately to the implementation of a curriculum that already has accreditation, thereby reducing the risks within the assessment and accreditation process.

We project that by the time the partner institution programs are eligible for consideration under this strategy (e.g., have at least one student cohort graduated), nearly all programs will be transitioned to partner-institution instruction only, and thereby be appropriate to be submitted under a Request for Evaluation (RFE). We project some programs to potentially be eligible and prepared to submit the RFE as soon as the end of CY5. Hence, by 2020 these programs should be in the process of applying or ready to apply for ABET or ACS accreditation. Other programs may require a longer transition period, and depending on the speed of capacity building within that program, may require as much as two additional academic years. .

A second strategy to support accreditation of partner institutions is described in Section II-A.2. Accreditation of Georgia Programs.

To directly support accreditation activities, resources for accreditation consultation and fees will need to be included in the long-term sustainability plan as described in Section VII. Sustainability Plan and Appendix B.

B. Monitoring

SDSU shall cooperate with MCA-Georgia on data reporting issues as per the MCA Georgia Management and Evaluation (M&E) plan adopted on March 11, 2016. From the monitoring perspective SDSU shall provide the data indicated in the Indicator Tracking Table (ITT) on a quarterly basis as requested by MCA-Georgia.

C. Metrics

Metrics tracked will include programmatic evaluation according to criteria required for discipline-specific accreditation and may include:

a) Students – the qualifications and characteristics (including bulk demographic information) of the students who are admitted into SDSU-Georgia and the monitoring of their performance against graduation requirements.
b) Program Educational Objectives – the mission of the program and its consistency with the institution's mission. This criterion requires a working relationship with industry and an Industry Advisory Board in order to establish objectives and to assess the degree to which graduates achieve them in practice after graduation. Because it relates directly to post-graduation performance, the reporting during the MCC project period would consist of reporting of the objectives, but not collection of related performance data.
c) Program Outcomes – program outcomes must be established to achieve the program's educational objectives, and performance must be assessed against them. This assessment is made via metrics that are established with both direct and indirect assessments. Culminating experiences are also incorporated in the assessment strategy. Such assessments are regularly reported as part of program quality assurance (QA) activities, and could be shared.
d) Continuous Improvement – metrics must be monitored over time and used to improve the curriculum in general. The data collected under criteria iii would be analyzed and reported as part of the assessment requirements for accreditation.
e) Curriculum – program curriculum is defined to achieve the program outcomes, and the details of this connection must be established.
f) Faculty – the, qualifications, size and the composition of the faculty to meet the needs of the curriculum.
g) Facilities – the physical resources (classrooms, labs, offices) available to support the needs of the program.
h) Support – financial resources to allow faculty development and support services of the Departments providing these programs.

D. Evaluation

Program evaluation is crucial to the design and success of the Collaborative Agreement. SDSU will provide ongoing support for both summative and formative evaluation efforts. SDSU will designate staff to be responsible for facilitating the ongoing evaluation process. The specific data being gathered and analyzed will be consistent with the program metrics, including educational metrics and approved key performance indicators (KPI).

The review process will assist both the management and Advisory Board in conducting ongoing strategic decision-making in relation to the desired outcomes of the project. Formal program

evaluation will occur no more frequently than annually. In addition, SDSU shall cooperate with MCA Georgia and MCC-contracted Independent Evaluator on developing specific evaluation designs to detect the impact of the program as per the MCA-Georgia M&E plan adopted on October 2, 2014 and updated on March 11, 2016. SDSU shall collaborate with the evaluator by suggesting research questions, providing feedback on the proposed evaluation methodology, recommending specific questions or approaches related to gender and/or social empowerment and learning, and assisting in data collection efforts if necessary.

E. Approval Matrix

The parties recognize that factors such as trends and status of the economy, industry needs, and student interest will change over time. SDSU shall report to MCA-Georgia per Appendix B and, on an as-needed basis, where such factors impact the SDSU-Georgia Program requiring the need to make curricular adjustments that affect accreditation of the Programs offered by SDSU or the partner universities under this Agreement or re-allocation of resources which materially impact the Scope of Services of this Agreement. The following table delineates where changes may require written approvals during the approved funding period as opposed to information sharing:

Proposed Action	MCA Approval Required	MCA Project Manager Approval Required	No Approval Required *
Adding, adjusting the timing of implementation or deleting a degree program	X		
Eliminating, replacing or adding a partner institution	X		
Elimination or addition of laboratories		X	
Reallocation of funds ***within*** the three major cost categories			X
Reallocation of funds ***between*** the three major cost categories in excess of 25% of category from which funds are being moved		X	
Reallocation of funds in either direction between SDSU/SDSURF budget and MCA-Georgia budget *	X		

Consultant shall use its best efforts to submit any actions requiring prior approval to MCA–Georgia at least one quarter prior to the desired implementation date. Any other actions undertaken by Consultant not listed in the above approval matrix above shall be in compliance with MCC and MCA-Georgia requirements.

*Reallocations of funds should generally be addressed through the Quarterly Disbursement Request Package (QDRP). Changes that affect the semi-annual procurement plan may be affected by the December and June submissions of procurement plans.

F. Annual Review

May Review: On an annual basis, (by May of each program year) SDSU/SDSURF will submit an updated scope of services and budget for the subsequent agreement funding period. The revised scope of services will identify any proposed material changes to the program to ensure its continued viability and sustainability taking into consideration factors such as student demand, enrollment projections, operating budget revenues and other factors experienced or anticipated that may impact the direction, scope and financial viability of the program as originally envisioned. MCA-Georgia and SDSU/SDSURF will collaborate on the development of the revised scope of services and budget plan which will be implemented via an amendment and extension of the agreement as agreed to by both parties.

March Assessment: The parties agree that no later than March 31 of each year, beginning in 2016, the parties shall estimate the enrollment for the cohort entering the following academic year. The estimate shall be based on the number of scholarship and fee-paying students committed to enter the SDSU-Georgia program that academic year and shall include criteria for determining student commitment to enroll. The agreed estimate shall be a significant factor on which the parties shall determine the viability of accepting a cohort for each academic year starting in 2017.

No (a) California State funds or (b) funds of Consultant can be used in connection with the program or activities implemented under this Agreement, whether conducted during the 45 month or post-Compact periods, with the exception of the following:

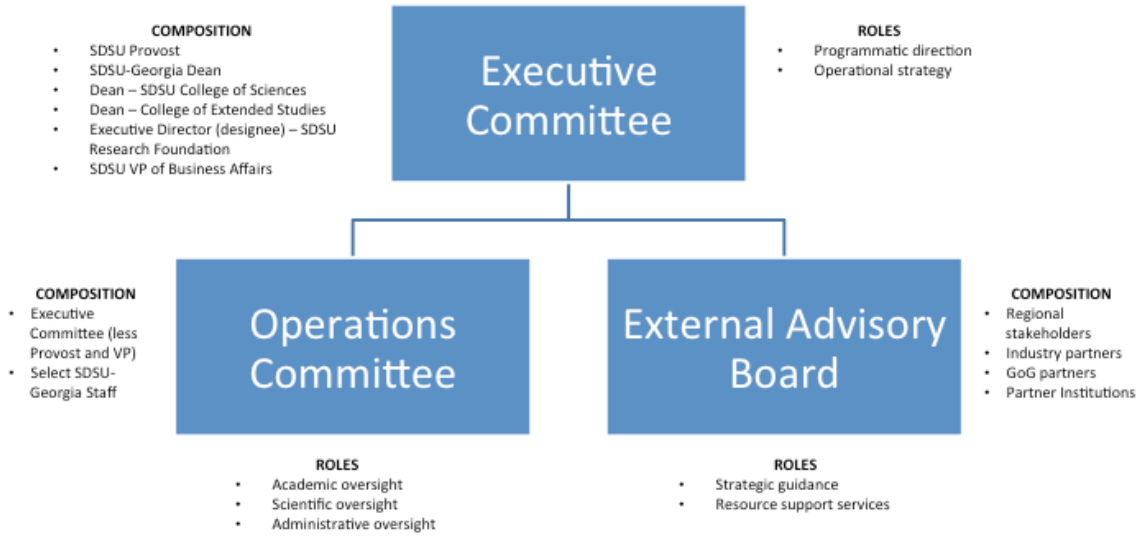
1) Funds received in connection with the program (e.g. tuition, GoG lump sum, GRDF funds.)
2) Funds generated by activities implemented under this program (e.g. book sales or other self-support activities.)
3) Funds designated to support the program or activities under this Agreement (e.g. gift funds, internships, industry scholarships.), and (4) other.

The admission and enrollment of the second cohort and each subsequent cohort shall be contingent on the prior execution of an agreement providing for the funding of all program costs not covered through tuition or scholarships for each such cohort through graduation based on a four-year curriculum and sufficient to fund any phase-out plan that may be necessary to develop under General Condition and Special Condition 2.11. Consultant and MCA-Georgia shall work collaboratively to secure such funding agreement.

VI. Governance Structure

Key to successful accomplishment of the Collaborative Agreement objectives and requirements will be the performance of the management team and supporting members. Accordingly, the Program will be managed as a collaborative partnership with academic, scientific and administrative oversight from the Operations Committee; programmatic and operational direction from the Executive Committee, and strategic guidance and resource support services from the External Advisory Board which will be staffed by key members of the SDSU-Georgia team, Principal Partner universities; and selected activity and processes support from stakeholders, and other service providers.

In addition to Program Leadership consisting of the SDSU Provost, and SDSU-Georgia Dean, collaborative activities by SDSU colleges will be managed as a partnership headed by an Executive Committee. The Executive Committee will include the Provost and the Deans of the College of Sciences, Engineering, Arts & Letters and College of Extended Studies from SDSU, and the Executive Director or designee of the SDSU Research Foundation. Program personnel will be an appropriate combination of US-based and Georgian academic administrators.



VII. Sustainability Plan

Within the month after beginning of the academic year 2018-19, SDSU will present a final plan for evaluating long-term sustainability that includes financial structure and institutional capacity to continue STEM higher education programs beyond the end of the Compact. Factors to be included in this plan include revenue flows to support programs, aligned with GoG financial resources, families' ability to finance higher education, and other sources such as private sector contribution, financial aid and loan schemes, etc. Institutional capacity includes technical, instructional, accreditation, and organizational capacity of partner universities.

Appendix B - Summary of Report Contents

Objective Basis	Report Focus	Report Types	Schedule	Comments
Overall Progress	Summary of project activity	Presentation/Meeting	Quarterly	Regular presentation of current status, highlighting any projected changes to academic or construction plans as compared to previously agreed plans. Notes circulated after meeting to document approval/status of any changes or issues noted in the presentation.
	Program Longevity	Sustainability Plan	Annual	Plan for 2017-18 and post-Compact term sustainability that includes financial structure and institutional capacity to continue STEM higher education programs beyond 8-month agreement. Plan will reflect projected enrollment in Spring and be updated with actual total enrollment in Fall 2017.
Build Capacity	Development of Instructional Facilities	6-Month Procurement Plan	Twice Annually	Rolling projection of upcoming procurement plans to inform MCA-G to prepare cash projections and procurement staff for upcoming construction/renovation procurements conducted by MCA-G
		Facilities Development Plan	Quarterly	Report should include but not limited to: 1. Table of Contents 2. Baseline MS Project work plan(s) for renovation, outfitting activities, integrating equipment delivery and installation, then updated each quarter 3. Project(s) Summary including: a. Detailed description of all construction and renovation works by partner university (i.e. TSU, GTU, etc.). b. Relevant notes by work site, including any construction observations and relevant documentation. c. Analysis of progress against the program/work plan. d. Explanation of the causes of any delays. e. Assessment/evaluation of any quality issues. f. Construction health and safety reporting, such as the use of PPE by works contractor safety violations, and other updates on ESMP compliance as relevant. g. Assessment of any design issues, and proposals to addressing these. h. Operations and maintenance summary. The text should include physical planned and actual progress and financial planned and actual progress for each school in a table and graph form 4. Additional Appendices (e.g photos, other as needed)

Objective Basis	Report Focus	Report Types	Schedule	Comments
		Design/Construction Packages	As needed	Design packages and bidding documents for use by MCA-G in developing tender packages for the construction/renovation activities
		Monthly Construction Reporting	Monthly	As required by terms of construction/renovation contracts, reporting of progress, acceptance of contractor work, pay requests, and so on.
	Faculty Development	Faculty Development Report	Post-semester	Description of selection criteria and list of the Georgian partner university representatives selected for teaching at SDSU-G programs. Summary of development activities for faculty from the partner institutions which occur during the academic semesters. Highlights of progress towards meetings faculty training objectives outlined in Appendix A section II-D-3-a) and key conclusions of post-San Diego visit assessments referenced in Appendix A section II-D-3-b).
	ABET/ACS Progress	Accreditation Progress report	Annually	Summary of progress toward the goal of facilitating accreditation of Georgian programs at the partner universities by ABET or other appropriate US accreditors. Detailed update per university and per program should be provided. Tentative "road map" of obtaining ABET/international accreditation per program should be provided. Should identify obstacles to US accreditation in Georgian law or policy, accomplishments toward accreditation of each of the partner programs.
	Engaging Industry	Semi-Annual Report	Semester	Report on innovative efforts to engage industry to partner with universities to promote the relevance of learning vis a vis general needs of industry
Deliver Degrees	Recruitment	Recruitment Strategy	Annually	Review and analysis of outcomes of prior year's recruitment efforts, a situation analysis, objectives and activities outlined to meet these objectives, identification of personnel and responsibilities, and a detailed workplan including a timetable and budget.
	Enrollment in Programs	Presentation/Meeting Enrollment Report	Semester	Summary of enrollment/admission/attrition of students in SDSU-G programs. Fall Presentation to be conducted shortly after the completion of the enrollment process, approximately late August/early September each year, covering NAEC outcomes and projections. Spring presentation in early March with update on Fall retention and early enrollment process.
	Academic Progress	Academic Course Delivery and Progress (ACDP) Report	Post-semester	Metrics and narrative description of the courses conducted in a given semester and the related student outcome achievement, formatted for accreditation reports. Includes updates on plans for new degree programs in upcoming semesters, internship progress, and other indicators.

Summary of Deliverable Submissions – NOT including those specific to construction and renovation				
	Type	Contents	Deliverable for payment to Consultant?	Associated Payment
10-Nov-16	Inception Report	Updated Workplan, updated Recruitment Strategy	Yes	$551,024
10-Nov-16	Procurement Plan	6-Month Procurement Report	No	N/A
31-Jan-17	Quarter 1 Progress Report	Progress Meeting (and related minutes) Academic Course Delivery and Progress Report for Fall 2016 Faculty Development Report	Yes	$770,513
30-Mar-17	Cohort	March Assessment of 2017 Cohort Viability	No	N/A
30-Apr-17	Quarter 2	Progress Meeting (and related minutes) Initial Enrollment Report for Spring 2017 Faculty Development Report	Yes	$770,513
15-May-17	Procurement	6-Month Procurement Report Budget for next 12-month time period (July 1, 2017 - June 30, 2018) Work plan for next 12-month time period (July 1, 2017 - June 30, 2018) Amendment for CY 2017-2018	No	N/A
15-Jun-17	Final report	Progress Meeting (and related minutes) Progress Report for Spring 2017 Capacity Enhancement Report for academic year 2016-17 Sustainability Plan for CY 2017-2018 Enrollment Report and Budget for Fall 2017 Annual Work plan for 2017/18	Yes	$1,392,555

31-Jul-17		Academic Course Delivery Report for Spring 2017	No	N/A
			Overall 8 month budget, including:	**$4,646,140**
			Education Part Budget	**$3,484,605**
			Infra part Budget	**$1,161,535**

Summary of Deliverable Submissions – ONLY those specific to construction and renovation

	Type	Contents	Deliverable for payment to Consultant?	Associated Payment
17-Jan-17	Con/Reno	Summer 2017 Renovations 30% Documents	No	0
31-Jan-17	Con/Reno	Reports of 2016 renovation activity.	Yes	$348,460
17-Feb-17	Con/Reno	Summer 2017 Renovations 70% Documents	No	0
31-Mar-17	Con/Reno	Summer 2017 Renovations 100% Documents	Yes	$92,923
30-Apr-17	Design / Construction	ISU 100% Fit-out package/ Construction Documents (**MCC No Objection applies**)	Yes	$371,691
30-06-2017	Con/Reno	Facility Development Report Reports of 8-month contract time period renovation activity.	Yes	$348,461
Schedule for 17/18 to be reported in Work plan in 2017, expected to model this schedule.				

SAN DIEGO STATE UNIVERSITY

Georgia

SDSU 297-09-16

September 27, 2016

Magda Magradze
Chief Executive Officer
Millennium Challenge Account – Georgia

Dear Ms. Magradze,

Please find enclosed herewith the Fall 2016 Enrollment Report, a deliverable for the Provision of Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics, as required per the contract.

Per the terms of the agreement, please provide review comments within 10 business days.

Please feel free to contact me if you have any questions.

Sincerely,

Kenneth D. Walsh, Ph.D.

Dean, SDSU-Georgia

SAN DIEGO STATE UNIVERSITY

Georgia

Enrollment Report

September, 2016

1 INTRODUCTION

1.1 Project Overview

The SDSU-Georgia program was initiated in July of 2014 under a 15-month contract to cover those activities prior to the enrollment of students. This period was referred to as the "pre-enrollment period." The first cohort of students was enrolled in September of 2015. This report is a requirement of the subsequent contract, initiated in October of 2015, which covers the remaining 45 months of the project.

1.2 Purpose of this document

This document is intended to provide a summary of the expected enrollment for the upcoming semester. The final enrollment will be summarized, along with academic outcomes, after the end of each semester in the Academic Course Delivery Report.

2 ENROLLMENT

2.1 Continuing Enrollment

In Spring semester of 2016, there were 84 active students, one student on academic leave, and one international student on medical leave. Names, identification numbers, and other specific details were conveyed under separate cover for purposes of GRDF and Government of Georgia Lump Sum financing. From the Fall semester of 2015, there were a total of 4 students placed on academic probation. At the end of Spring semester 2016, one student was disqualified from the SDSU Georgia program because he could not satisfy the TOEFL requirement of SDSU to stay in the program. Two other students were disqualified due to low academic performance. During the mobility period, all three students were assisted to successfully transfer to programs at the partner universities. One additional student, who had taken academic leave for 2015-16 AY, did not return. One student left during the mobility period to a private Georgian university. Accordingly, from the 86 first cohort students in Spring 2016, we have 81returning for Fall 2016.

In Fall semester of 2016, the 81 returning first cohort students, 78 are active students and we have three students on academic leave.

2.2 New Enrollment

During the Fall semester of 2016, we enrolled a total of 126 new students: 106 students from the national exam (NAEC); five students from high schools with IB or other international curriculums; four mobility students; and 11 international students. Additional data from these groups of students are given in Table 1.

Table 1: Second cohort enrollment data.

Group	Number of Students	Notes
Georgian citizens	**115**	• 106 are NAEC students (102 - TSU, 4 - ISU, 0 – GTU) • 5 IB-MOU students • 4 mobility students • Tbilisi - 73 students (56%), • Regions - 42 (33.3%); • 55 - Females (43.7%); • 20 SV students (16%).
International	**11**	• 10 students from Iran and 1 student from Turkey. • 5 Females (all from Iran). • Computer Science 1 • Chemistry – 1 • Electrical Engineering - 1 • Computer Engineering - 8
TOTALS	**126**	• Computer Science - 36 (28%); • Chemistry - 39 (31%); • Computer Engineering / Electrical Engineering - 51 (41%).

2.3 Total Enrollment

As of this writing, with the return of 78 first cohort students and the addition of 126 second cohort students, the total student headcount in the Fall of 2016 is 204. This is comprised of 190 Georgian students and 14 international students. A complete listing of student names, identification numbers, etc. will be provided to MCA-Georgia.

2.4 Course Offerings

Course offerings and the academic calendar for Fall 2016 is presented in Figure 1.

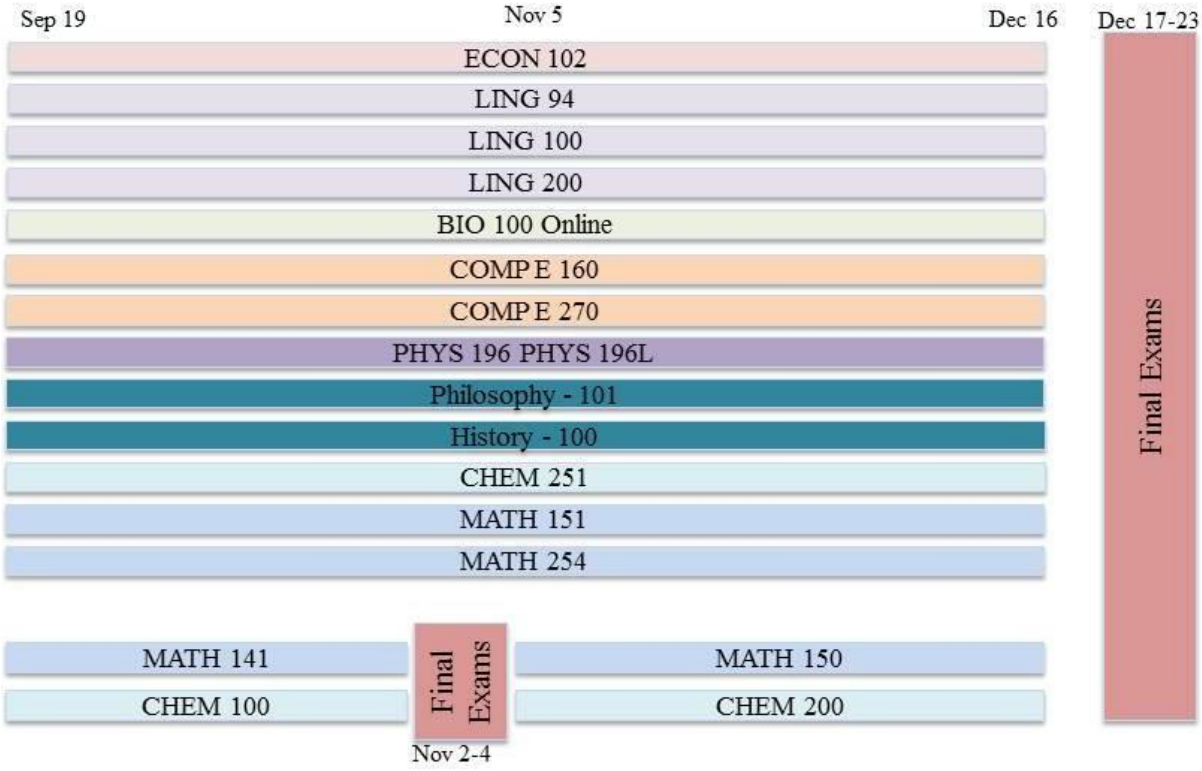


Figure 1: Course Offerings and Academic Calendar, Fall, 2016

Enrollment in specific courses will vary by the level (sophomore versus freshman), major and by the performance on placement tests, as well as the performance in the Fall of 2016. For reference, notional class schedules for typical freshman students by majors are presented in Table 2. Notional class schedules for typical sophomore students by major are presented in Table 3. List of instructors for Fall, 2016 are given in Table 4.

Table 2: Notional Class Schedules for Typical Freshman Students By Major, Fall - 2016

Electrical Engineering 1st year		
	Course	**Units**
1	Math 141	3
2	Math 150	4
3	Ling 94	Out of Major
4	Ling 100	3
5	Bio 100	3
6	Econ 102	3
7	Philosophy 101 (If they are in Ling 100)	3

Computer Engineering 1st year		
	Course	**Units**
1	Math 141	3
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3	Biology 100	3
4	Econ 102	3
5	Ling 94	Out of Major
6	Ling 100	3
7	Philosophy 101 (If they are in Ling 100)	3

Chemistry/Biochemistry 1st year		
	Course	**Units**
1	Chemistry 100	4
2	Chemistry 200	5
3	Ling 94	Out of Major
4	Ling 100	3
5	History 100	3

Computer Science 1st year		
	Course	**Units**
1	Math 141	3
2	Math 150	4
3	Ling 94	Out of Major
4	Ling 100	3
5	Econ 102	3
6	Philosophy 101	3

Table 3: Notional Class Schedules for Typical Sophomore Students By Major, Fall - 2016

Electrical Engineering 2nd year		
	Course	**Units**
1	Math 254	3
2	Computer Engineering 160	3
3	Computer Engineering 270	3
4	Physics 196	3
5	Physics 196 Lab	1
6	Ling 100	3
7	Ling 200	3
8	Philosophy 101	3

Computer Engineering 2nd year		
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Table 4: List of instructors for Fall, 2016.

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Chemistry 251	Nino Kokiashvili - TSU; Christopher Harrison
Ling 94/100/200	Nina Jojua - TSU, Amanda Black, Hasan Autman
Math 151/254	Giorgi Chelidze - TSU
Math 254	Alekxander Meskhi - GTU
Math 141/150	Nino Manjavidze - ISU; Jim Frankenfield
Math 150	David Natroshvili - GTU;
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Econ 102	Irakli Murtskhvaladze - TSU
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History 100	Leri Tavadze - TSU
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Computer Engineering 270	Ia Mosashvili - GTU; Ke Huang
Physics 196/196L	Giorgi Tsitsishvili - TSU; Matt Anderson

SAN DIEGO STATE UNIVERSITY

Georgia

Enrollment Report

September, 2016

Revised November 2016

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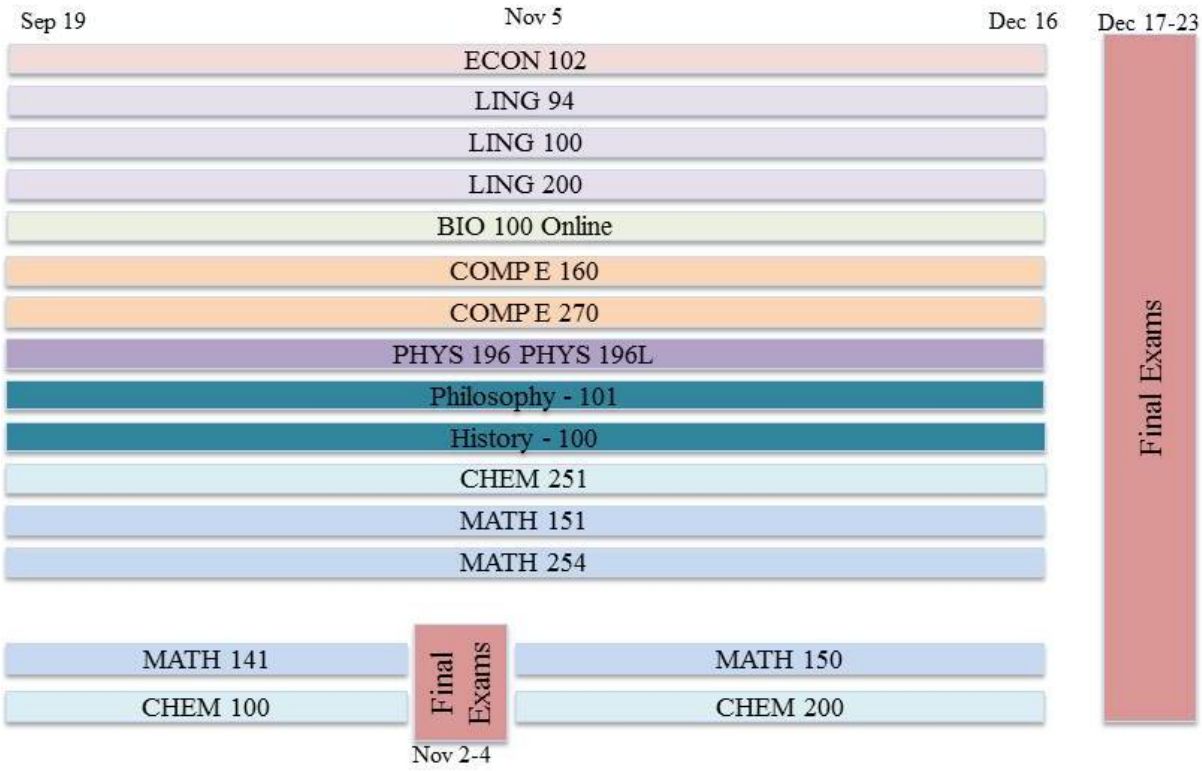

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Physics 196L	Giorgi Tsitsishvili* - TSU

Notes: *Lead instructor, + Hybrid format

For reference, the academic calendar for the Spring, 2017, semester is shown in Table 5. The breakdown of classes and sections will be presented in the next Enrollment Report.

Table 5: Spring 2017 Academic Calendar.

Classes	23 Jan-11 May
Final Exams	15 May – 20 May
Chemistry Extended Session for Chem 432	22 May-27 Jun
Holidays	3 Mar, 8 Mar, 14 Apr, 17 Apr, 12 May, 26 May

SAN DIEGO STATE UNIVERSITY

Georgia

SDSU 297-09-16

September 16, 2016

Magda Magradze
Chief Executive Officer
Millennium Challenge Account – Georgia
52 Uznadze Street
0102 Tbilisi, Georgia

Dear Ms. Magradze,

Please find enclosed herewith the Revised Recruitment Report, a deliverable for the Provision of Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics, as required per the contract.

Per the terms of the agreement, please provide review comments within 10 business days.

Please feel free to contact me if you have any questions.

Sincerely,

Kenneth D. Walsh, Ph.D.
Dean, SDSU-Georgia

2016

2016-17
SDSU Georgia
Cohort
PROGRESS
September 15, 2016

SAN DIEGO STATE UNIVERSITY
Georgia

REVISED RECRUITMENT PLAN PROGRESS
September 15, 2016

SDSU Georgia implemented the Revised Recruitment Plan submitted in March 2016. The 14 recruitment tools outlined in the plan yielded 143 early applicants to SDSU-G. Of these, 115 applicants were academically qualified and conditionally admitted to SDSU Georgia. Subsequently, these applicants were invited for an interview. 10 applicants were disqualified during the interview process, leaving a pool of 105 prospective students. From this pool, 96 students accepted financial aid and scholarship offers, yielding an average scholarship of 72% (with a 28% contribution from the parents).

After the announcement of the NAEC results, SDSU-G implemented the final recruitment tool; sending SMS text messages to qualified students who had high scores in the NAEC exam. This strategy, which was first implemented for 2015-16 cohort, produced good results this year too.

At the closing of the NAEC appeal period on August 11, 2016, SDSU Georgia had 111 students who were interviewed, conditionally admitted to SDSU-G, and accepted the financial aid offers. On the closing day, the number of students who ranked SDSU-G as number 1 choice in the NAEC registry was 117. The breakdown among the partner universities was 109 TSU, and 8 ISU – GTU combined.

In addition to these, 6 students were admitted without the NAEC exam (IB and MOU students), 4 students were recruited as mobility students, and 14 international students from 5 countries (Iran, Turkey, Russia, Nigeria, Libya) were conditionally admitted to SDSU Georgia. Attached report provides additional details and statistics.

1. Background:

SDSU-G submitted a Revised Recruitment Strategy in March 2016. This strategy outlined a recruitment plan with 14 distinct recruitment tools and techniques (attached here as Appendix A). This report summarizes the recruitment progress and results.

2. Progress:

	RECRUITMENT TOOLS & TECHNIQUES	STATUS
1	Feeder Schools	12 signed- including American Academy of Tbilisi and 11 others + 6 pending
2	"Feeder Tutors/Teachers"	Presentations at ETAG and Government's Teacher Prof. Dev. Center
3	STEM database	1500+ leads collected
4	ApplySDSU-G	Early registration incentive (new implementation) – 143 applications Required early registration fee (**88-- 51 paid + 37 socially vulnerable have waived fees)**
5	CRM	All the leads in the database are contacted by phone, etc.
6	Regional recruiting & ELA	5 regional centers: Batumi, Kutaisi, Telavi, Akhaltsikhe, Zugdidi.
7	Partner Universities	ISU - Pathway international students, TSU - Turkish students, GTU-ABET
8	Private sector participation	Partnership with business and industry including launch of the public private partnership fund (PPPF) -- underway
9	Student Mentor Program	Help Center / Tutorial for Math and Physics, Mentorship started
10	English Language support center	TOEFL support (Jan 20 - Feb 20), English Language Academy
11	STEM Academy	Two STEM Academies held as recruitment tools.
12	Financial Assistance	Merit and need based instituted for socially vulnerable and star students: Financial data forms prepared / interviews conducted.
13	International student recruitment	Target countries: Azerbaijan, Turkey, Kazakhstan, Nigeria, India, China, Vietnam, Gulf states, Jordan
14	SDSU-Georgia Website	ENG and GEO languages : Visit our website (**www.georgia.sdsu.edu**)

3. Feeder Schools

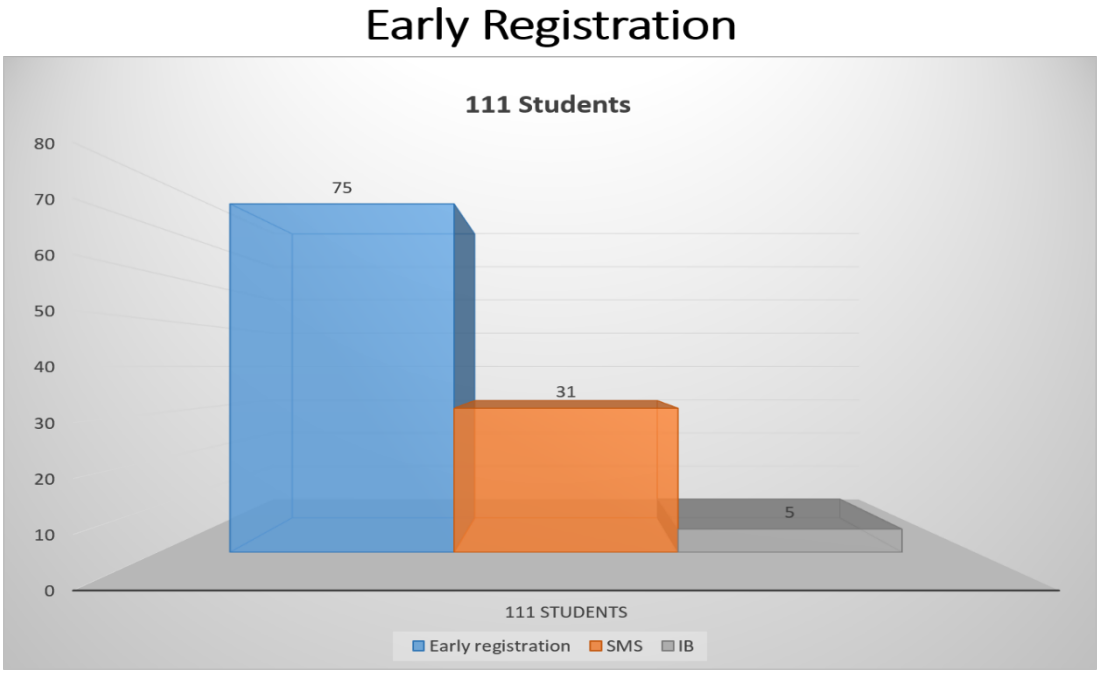
	Name of High School	Status	# of applicants	Actual enrolled
1	• American Academy - GZAAT	signed	2	2
2	• Buckswood International School	signed	2	2
3	• Logos	signed	1	1
4	• Demirel College	signed	4	5
5	• Servantes GESS	signed	1	0
6	• Newton School	signed	1	1
7	• European School / American H. School (IB)	signed	2	2
8	• New School --- (IB)	signed	1	1
9	• QSI (MOU)	Signed	1	1
10	• Chaglar International (MOU)	Signed		2
11	• School of Tomorrow (MOU)	Signed	1	0
12	• Georgian American High School (Kutaisi)	Signed		1
13	• Vekua #42	pending	8	7
14	• Komorov #199	pending	8	4
15	• Kutaisi Math & Physics School	pending	4	3
16	• #1 First Experimental	pending	3	3
17	• #1 Gymnasium	pending	1	2
18	• Robert Schumann European School	pending	2	1
	• TOTAL		40	38

4. Recruitment results

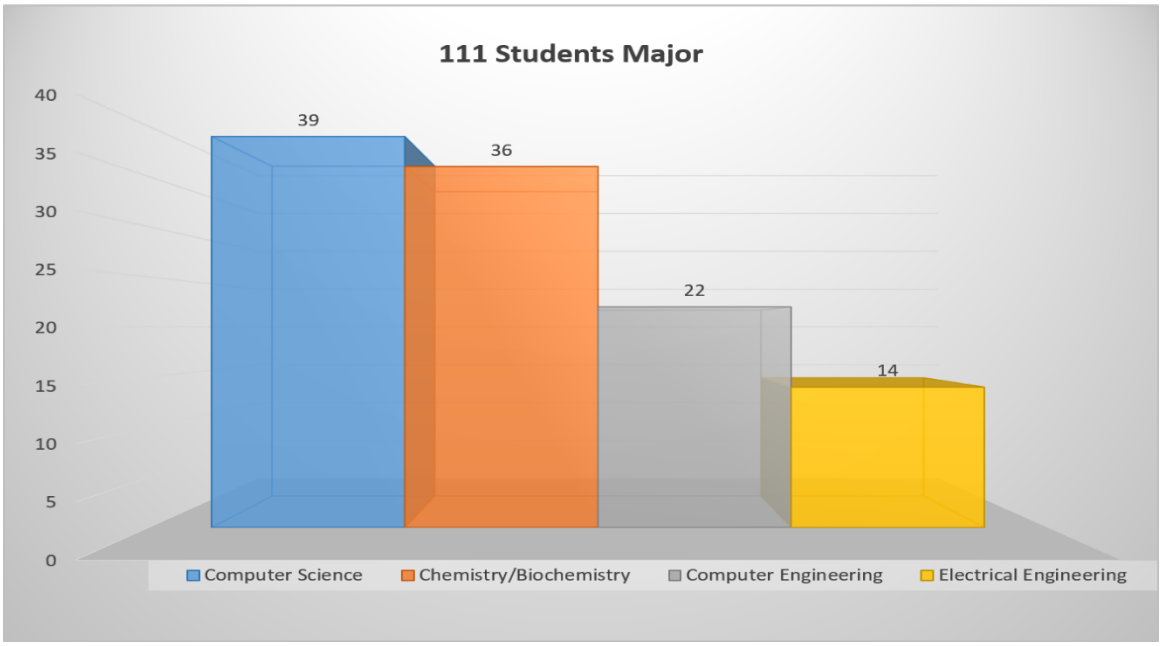
NAEC Appeal closed August 11- 18:00 pm:

- We have 111 Georgian students who accepted our offer
- 106 NAEC students and 5 IB/Transfer students
- 45% girls-
- Final family co-pay rate 25.5% (i.e., av. GRDF scholarship 74.5%)

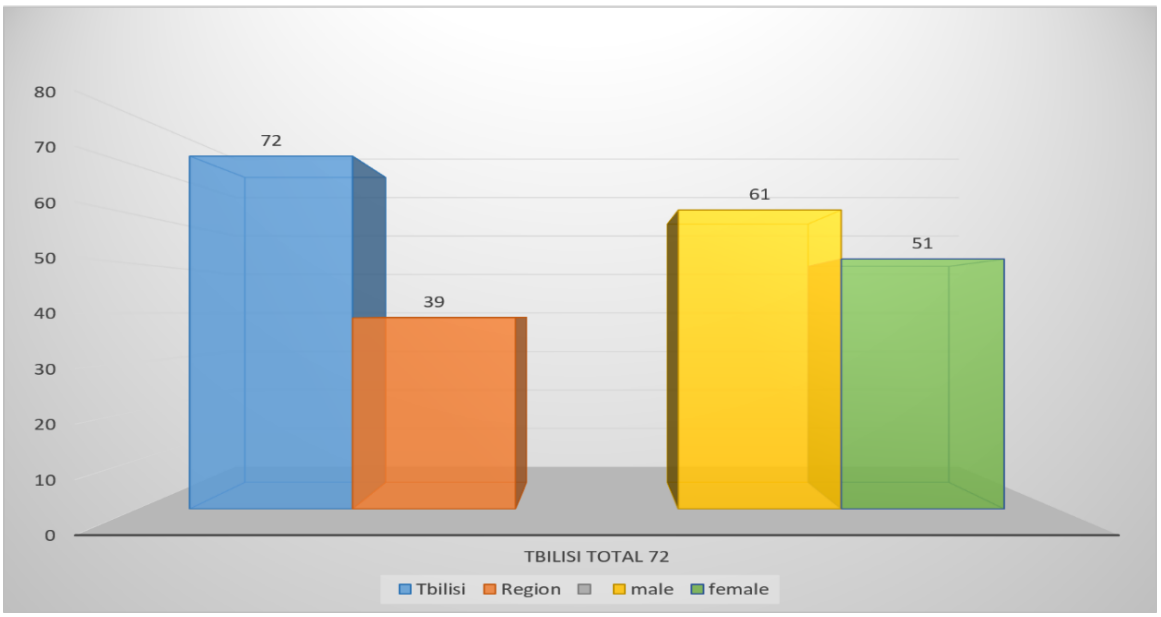
International students:
We had 24 applications, 14 students admitted



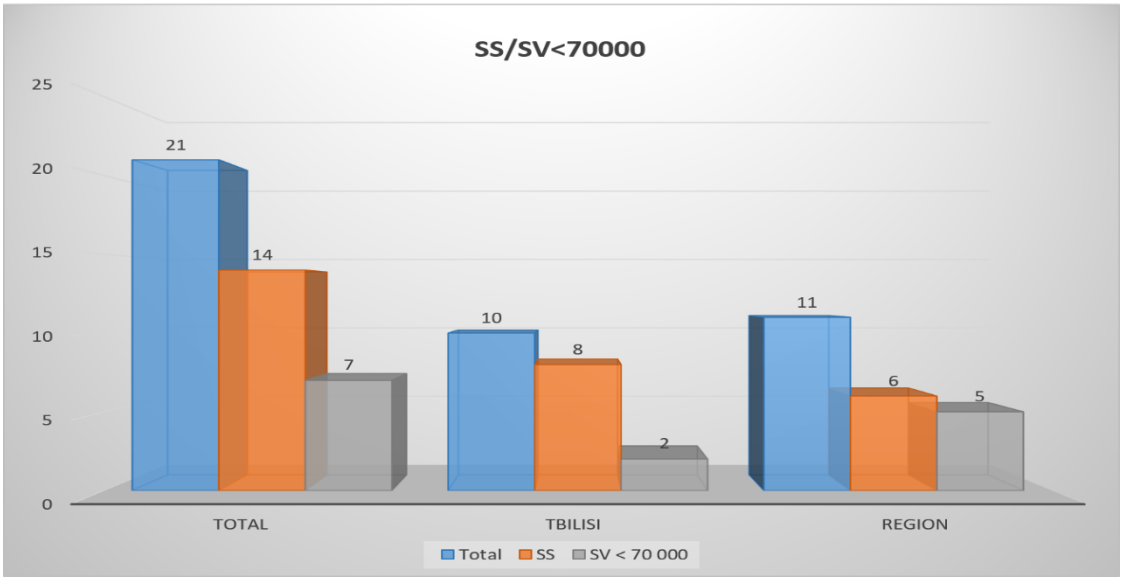
Majors



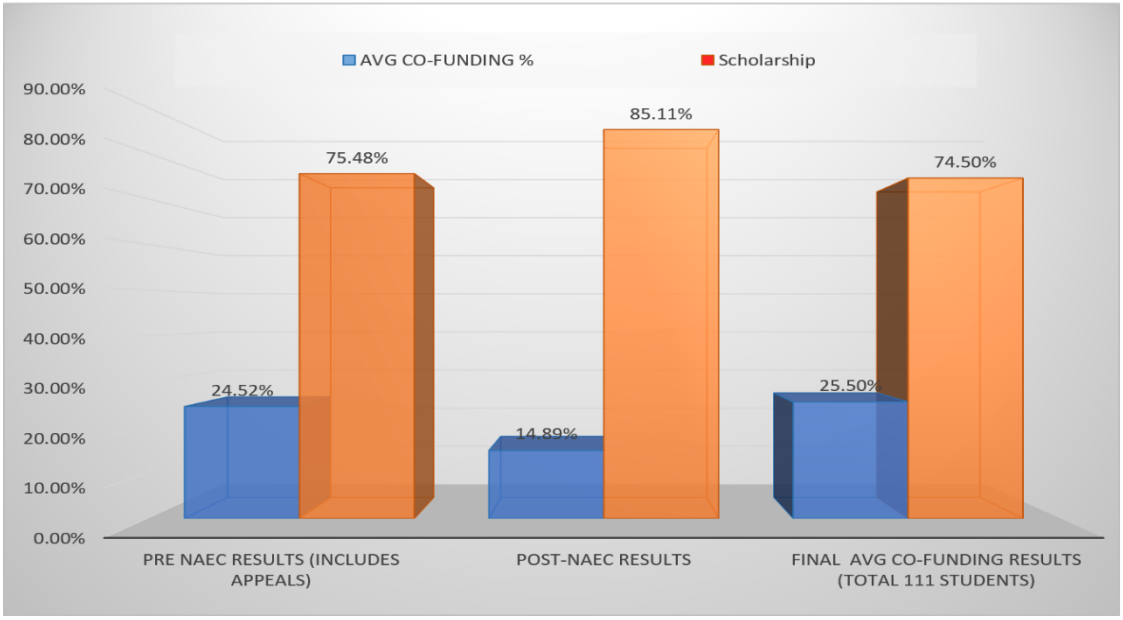
Tbilisi – Region / Gender



Social Support / sv



Scholarships vs Parents' Co-pay



5. NAEC Registration Results (August 11, 2016) wrt Partner universities

Uni	Program Name	Quota	# of students who marked SDSU-G #1	ACTUAL enrolled (Sept 15, 2016)
GTU	1) Electric Engineering 2) Comp. Engineering.	40	2	0
	Chemistry/Biochemistry	20	0	0
ISU	1) Electric Engineering 2) Comp. Engineering.	100	6	4
	TOTAL for GTU and ISU	**200**	**8**	**4**
TSU	1) Electric Engineering 2) Comp. Engineering	100	42	37
	Comp. Science	50	33	32
	Chemistry/Biochemistry	50	34	33
	TOTAL for TSU	**200**	**109**	**102**
Grand TOTAL		**400**	**117**	**106**

6. Registration Results (September 15, 2016)

Group	Number of Students	Notes
Georgian citizens	116	• 106 are NAEC students, 6 IB, and 4 mobility students • *102 - TSU, 4 - ISU, 0 – GTU* • Tbilisi - 71 (56%), Regions - 42 (33.3%); • 55 - Females (43.7%); • 20 SV students (16%);
International	14	• Students from 5 countries (Turkey, Iran, Libya, Nigeria, Russia) • 10 out of 14 new international students are from Iran- 5 Females (all from Iran). • Computer Science 1 • Chemistry – 1 • Electrical Engineering - 2 • Computer Engineering - 9
TOTALS	130	• Computer Science - 37 (28%); • Chemistry - 39 (31%); • Computer Engineering/Electrical Engineering - 54 (41%).

7. Lessons Learned: Recruiting for 2015-16 Cohort

Lesson learned	Solutions/Potential Solutions
NAEC timeline complicates academic planning	APPLYSDSU early application
OUR APPLY-SDSU CAMPAIGN (launched February 1, 2016) **WAS SUCCESSFUL BUT LATE!!** (STUDENTS / PARENTS MAKE UP THEIR MINDS EARLY IN THE FALL)	Start Recruiting campaign when schools open , and maintain a very intense campaign of visiting schools (2 a day during the Fall semester).
Messaging should include 4-year scholarship dollar amount rather than 50%, 100%, etc. (confused w/ GoG scholarship)	WE NEED TO START ACCEPTING APPLY-SDSU APPLICATIONS IN SEPTEMBER. Messaging, when we go to school visits from DAY 1, should be "Apply online today to be considered for up to $30,000 of scholarship"
After students make up their minds about the NAEC university rankings (after March 15 NAEC registration closing), very few students revisit their decisions until after the NAEC results come out	WE WILL MAKE SCHOLARSHIP DECISIONS BEFORE NAEC REGISTRATION CLOSES

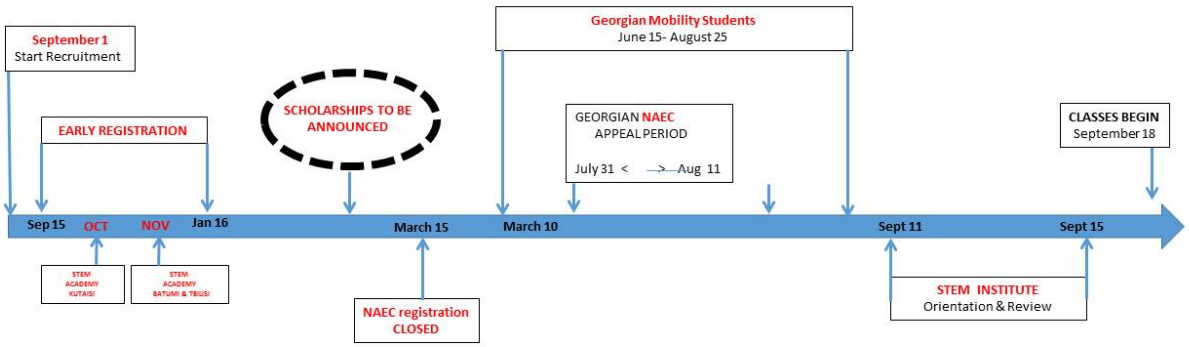
8. Recommendation for Third Cohort Recruitment Strategy:

For the third cohort recruitment, SDSU-G proposes to use the same recruitment strategy and tools implemented for the second cohort.

However, this time start the ApplySDSU early application process on the first day high schools start (September 15) and continue until January 16 (on this day early application will close). Academically qualified prospective students will be conditionally admitted to SDSU-G by January 31st, 2017. During the month of February, SDSU-G will invite conditionally admitted prospective students for interviews, and based on interviews make financial aid decisions / offers to qualified students. Prospective students will have financial aid offers before the NAEC registration deadline (March 15, 2017). Prospective students will be required to rank SDSU-G as #1 in their NAEC registration. After NAEC closes, we will be able to get data on how many students ranked SDSU-G as their top choice.

SDSU-G's SMS strategy, during the NAEC appeal period was successful in attracting highly qualified students ("last-minute recruits") for the last 2 cohorts. We propose to continue using this strategy too for the third cohort. A proposed timeline for the third cohort is given below.

THIRD COHORT (2017-2018) RECRUITING TIMELINE



Appendix A: Recruiting Tools and Techniques

2016-17 recruitment strategy is built around and supported by three main conceptual pillars

THREE PILLARS:

1. **FEEDER SCHOOLS**
2. **STEM BRANDING +++**
3. **EARLY RECRUITMENT**

These serve as the basis for the 14 recruitment tools and techniques employed in this year's recruitment strategy.

1. Feeder Schools

This year SDSU-G will implement a new strategy and sign letters of Memorandum of Understanding (MOU) with high schools in Greater Tbilisi area and in the Regions. This is aimed at prestigious private and public high schools. Especially two groups are targeted: Specialized public Math and Physics schools, and private schools that send majority of their graduates to overseas schools.

Administrators of the private high schools are contacted regarding MOU's. A sample MOU is attached as Appendix 7. For the private schools that send majority of their graduates to overseas schools (e.g., 90% of the American Academy graduates choose universities overseas), this year we will be offering a new program; this will enable their graduates that choose to study STEM in the U.S., to come back to Tbilisi and spend **"One semester or one-year in Tbilisi"** as a student at SDSU-G. The list of Feeder Schools identified by SDSU-G is in Table 3.

Table 3. List of Prospective Feeder Schools

	High School
1	American Academy
2	Buckswood International School
3	British Georgian Academy
4	New School --- **(IB program – graduating 20)**
5	Georgian American High School
6	Newton School (recent)
7	European School --- **(IB program -- graduating 24)**
8	Waldorff
9	Demirel
10	AES – Georgia
11	Mtsignobartukhutses
12	Green School
13	Logos
14	School 21st century
15	British Connection
16	St. George School
17	School Jejili
18	Komorov #199
19	Vekua #42
20	#1 First Experimental
21	#1 Gymnasium

2. "Feeder Tutors/Teachers"

Children of well-to-do families all have private English tutors to help them learn English language. There are also tutors to help high school seniors prepare for university entrance exams such as NAEC, TOEFL, IELTS, SAT, etc. In some cases, 12th graders skip majority of the school year, and stay at home with private tutors preparing for the "university entrance exams". This is true for students who plan to go outside of Georgia, as well as for those who plan to take NAEC exam and study in Georgia. It is therefore a challenge to find 12th graders in their schools during the outreach activities. For our outreach, promoting SDSU-G to 12th graders through private tutors, particularly for those who have English language tutors, is very important.

Besides "Feeder Schools", this year SDSU-G will connect with the 12th graders through their private tutors. A "Feeder Tutor/Teacher" program is initiated with the English Language tutors through English Teachers Association of Georgia (ETAG), and also with the MoES teachers using TPDC. Presentations are made to private tutors and STEM teachers. SDSU-G will also try to capture student data from English Language training

institutions: Study Abroad institutions (such as British Council, CIE, EducationUSA, etc.), American Corners, and the American Study Centers at the partner universities.

3. STEM Branding & Creation of Prospective STEM student database

This year there are approximately 47,000 high schools seniors in Georgia. Based on the experience of last year, it is expected that about 10% of these students will opt to pursue STEM related degrees (e.g., Chemistry, Computer and Information Technology Science, Engineering, Geosciences, Life sciences, Mathematical Sciences, Physics and Astronomy, Medical Sciences, etc.).

Social media activities, mostly Facebook, are an important part of SDSU-G public awareness, promotions, and recruitment. Social media activities are maintained by the SDSU-G's Director of Community Relations and Development.

Creation of a STEM database with the names and contact information of all these students will help in reaching out to help to promote SDSU-G. This will enable SDSU-G to engage in CRM activities, establish continuous communication with the prospective students, inform them of SDSU-G public lectures and other activities, and also increase awareness and interest in SDSU-G. This data is expected to be gathered primarily during our outreach activities to high schools. A sample data collection card for STEM database is attached as Appendix 8.

4. ApplySDSU-G: Early recruitment and early decision

Opposed to the university admission system in the United States, Republic of Georgia has a centralized university entrance exam (NAEC) and centralized university placement system. An example of early recruitment and early decision process (in a country which has centralized university entrance exam and centralized university placement) can be found at Bahcesehir University, Istanbul, Turkey. Similar to NAEC of Georgia, Turkey has a central authority for university entrance examination and placement, called OSYM. Since 2013, for STEM programs, Bahcesehir University is successfully implementing an early recruitment and early decision system, branded as ApplyBAU (http://applybau.com/). This can serve as an example to our early recruitment and early decision system.

Timing of the NAEC exam and lack of direct contact with prospective students posed a big problem for admission to SDSU-G programs last year. The Office of Admissions at SDSU main campus handles over 80,000 applications annually, and admits approximately 6,000-7,000 (less than 10%) of these to SDSU. The backbone of this operation is early decision. The SDSU Office of Admissions starts sending provisional admission letters as early as March.

This year SDSU-G is contemplating to complete the bulk of its recruiting efforts/ visits during the Fall semester, and ask students to apply for admission to SDSU-G, and

financial aid (optional), prior to, or at the same time they are registering for the NAEC exams. It is anticipated that SDSU-G will make early "conditional admission (CA)" decisions in March or April 2016. This will be done through a new process called ApplySDSU-G. ApplySDSU-G is an on-line application process that enables prospective Georgian students to apply for Conditional Admission (CA) and Financial Assistance (FA) to SDSU Georgia programs before taking the NAEC exam in July. For conditional admission decision, SDSU Office of Admissions will evaluate prospective student's high school transcripts (10th, 11th and first semester of 12th grade). Of course the admission decisions will be conditional, i.e., subject to successful completion of the NAEC exams.
This year, SDSU Georgia will add NAEC Physics and Biology exams into the list of science tests that prospective students can choose on NAEC. Also the minimum scores required to be accepted into SDSU Georgia's STEM degree programs are reconfigured as follows:

- General Aptitude: 40% + 1,
- Math: 50% + 1,
- Chemistry: 30% + 1,
- English: 65% + 1,
- Biology: 35% + 1,
- Physics: 40% + 1.

Conditionally admitted students will be asked to sign "**Intent to Enroll**" contract and make a payment of $100 as CA Registration Fee. This early admission system will help SDSU Georgia make budgetary plans, and have a better count of potential fee-paying students. A proposed timeline for early recruitment - early decision process is shown in Figure 2, and it is also presented in more details in Appendix 9.

5. CRM

Using **the Prospective STEM student database,** a CRM system is set up to track potential fee-paying students, girls, and socially-vulnerable student leads. A license for a CRM program is acquired and personnel are trained. The CRM activities have already started.

6. Regional recruiting & English Language Academy services for high school seniors

There are 10 regional centers, known as resource centers, which are responsible for effective functioning and policy distribution among the regions. For outreach activities, SDSU has to obtain the permission of the MOES and the regional centers to make presentation in schools. SDSU is working closely with a prominent and highly regarded Georgian consultant, the Center for International Education (CIE), to organize its outreach activities in Georgia, both in Tbilisi and in the regions.
Last year CIE completed 240 outreach activities in Tbilisi and in the regions, and also oversaw the English Language Academy (ELA). The target for this year's outreach is to

increase the information sessions by two-thirds and complete 400 meetings in Tbilisi and in the regions. This year CIE is also adding a new operation in Zugdidi, increasing the regional offices from four (Kutaisi, Batumi, Telavi, Akhaltsikhe) to five.
SDSU will continue its contract with CIE to perform regional outreach and recruiting services. CIE's proposal for this year's recruitment outreach and ELA services is included as Appendix 10.

7. Increased Cooperation with the Partner Universities

SDSU-G's new recruitment strategy calls for closer cooperation with the partner universities' PR departments. Joint promotional activities will enhance the effectiveness of SDSU-G's recognition / promotion. SDSU-G is working closely with Ilia State University in designing pathways program and recruiting Georgian and International students. SDSU-G is working with TSU and GTU on recruitment of Georgian students.

8. NGO and industry participation in STEM education and development

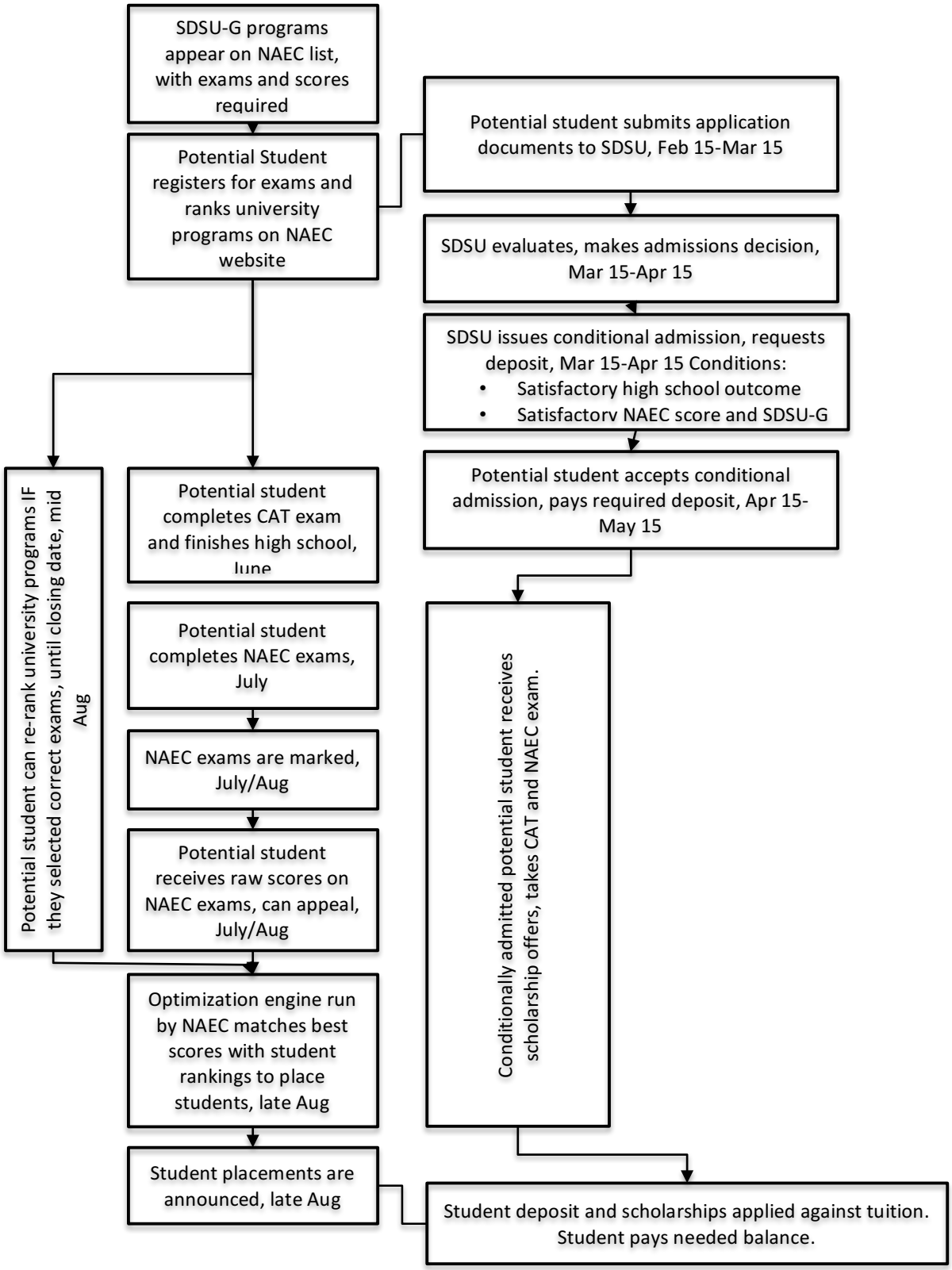
Though culture of philanthropy is not well developed in Georgia, SDSU-G plans to engage in the following activities to help develop private support for STEM and SDSU-G programs:

- Meetings with NGOs.
- Establishing private scholarships for SDSU-G students with business partners;
- SDSU-G Advisory Board: Ask influential members of the Advisory Board from the business sector to initiate additional funding opportunities and scholarships for SDSU-G student internships.
- Seek contributions from Georgian businesses (donations or grants);
- Organize business sector meeting in Fall and Spring periods;
- SDSU is a member of AmCham. SDSU-G will highlight sponsorship idea on the AmCham board meetings.
- Partner universities will be asked to initiate business partner meetings with participation of administration, their faculty and students.
- Seek more NGO participation (ETAG, etc.).

Provisional/conditional admission

SDSU is very experienced with provisional/conditional admission processes in its main campus. Developing tools and procedures to implement provisional/conditional admission at the SDSU-G campus for Georgian students should not pose insurmountable problems, and it should not pose any legal entanglements. The presence of the NAEC exam and exam thresholds can be overcome by making the provisional admission decision subject to completion of NAEC.

Figure 2. 2106 Early recruitment – early decision process for SDSU-G



9. Support Center for admitted students (Student Mentor Program)

Extracurricular activities are an essential part of an American style higher education. Currently, SDSU-G is using the facilities of its partner universities to deliver its degree programs. All three partner universities are "urban universities" and lack a US-style campus setting. As such, currently SDSU-G cannot offer its students a "student life" equivalent to those things offered on main campus. Moreover, there are no dormitories to house Georgian students from the regions outside of Tbilisi, and/or international students. Other than a few exceptions, in most cases, even simple things like a student canteen, student cafeteria, campus bookstore, or student study lounges do not exist at the partners. However, in due course, it is expected that such deficiencies will be remedied with the help of the partner universities.

A Support Center for admitted students is needed to maximize retention. A non-inclusive list of potential activities of the Support Center can be:

- Student tutor program
- Student assistantship program
- Winter Session intensive English Preparation Program.

A student mentor program is initiated for orientation of both Georgian and international students.

10. English Language support center

Though all Georgian SDSU-G students scored higher than the NAEC English threshold of 60 (set by SDSU-G), the institutional TOEFL test administered to the admitted students produced mixed results (Results of the English competency of the 2015-16 cohort are given in Appendix 6). According to the TOEFL results, only 46 students passed the threshold of 523 PBT. Remaining students need to complete the TOEFL test by May 2016. SDSU-G is setting up an English Language Support Center to help support these students.

11. STEM Academy

STEM Academy is designed to enhance the training of SDSU-Georgia students. It is anticipated that there will be intensive one week STEM training at the beginning of school year. A successful STEM Academy was conducted for the 2015-16 cohort in September 2015. For the current recruitment year, the STEM academy is intended for prospective students. This way STEM Academy can be used both for increasing the STEM awareness in Georgia, as well as a marketing tool for SDSU-G. Currently, the feasibility of having two STEM Academy sessions in the Spring semester is contemplated: One in Tbilisi for prospective students from the eastern provinces, and one in Batumi for prospective students from the western provinces. A non-inclusive list of potential STEM Academy activities is:

- STEM movie nights
- STEM trivia/dictionary night (competition with prizes)

- Visiting scientist from U.S. (in person or SKYPE/Zoom)
- Visiting speaker from Georgia industry

Visiting scientists from U.S. will speak with students about science careers, and future; speak with Georgian faculty about research; and speak with high school teachers about contemporary teaching of STEM subjects. A draft budget for the STEM Academy is included as Appendix 11.

12. Financial Assistance

There are two categories of financial assistance provided by SDSU-Georgia:

1. MERIT-BASED: Up to 50% financial assistance is provided based on merit. The decision on financial assistance is based on information students provide on their financial application form, which include a Statement of Purpose, and Recommendation letters.

2. NEED-BASED: *Social Support Program students who have **Disadvantaged Status** from MoES and girls who choose STEM qualify to receive up to 100% Financial Assistance from SDSU Georgia.*

13. International student recruitment

Another potential pool of fee-paying students that was considered viable during project planning in 2013/14 was students from outside Georgia. Such students would pay a differentially higher tuition than Georgian citizens, so that they actually provide more resources to the program than fee-paying Georgian students. Thus, such students could serve to subsidize tuition costs for Georgian students, making the program even more sustainable. Initial inquiries and review of data suggested that this was a viable pool of students. There are some sizable populations of international students in Georgia, and SDSU got feedback that there were interested students in the near region and in some more distant countries. Tuition of SDSUG for international students was set at $13,500.

14. SDSU-Georgia Website

A new dynamic website is being launched. The new website will be maintained locally under the supervision of SDSU-G's Director of Community Relations and Development, by SDSU-G's Webmaster at the SDSU-G IT department. Georgian Language website will also be available. ApplySDSU-G link is added to enable SDSU-G students to apply through SDSU-Georgia website.