



Research Department
Centre for Postgraduate Studies and Research

Research Annual Report



2019-2020



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List of Abbreviations

Abbr.	Description
AY	Academic Year
BFP	Block Funding Programme
CFS	Centre for Foundation Studies
Co-I	Co-Investigator
Co-PI	Co-Principal Investigator
CPSR	Centre for Postgraduate Studies and Research
DDAAR	Deputy Dean-Academic Affairs and Research
FBMS	Faculty of Business and Management Studies
FCS	Faculty of Computing Sciences
GC	Gulf College
IG	Internal Grant
MoHERI	Ministry of Higher Education, Research & Innovation
PI	Principal Investigator
RC	Research Committee
RD	Research Department
RG	Research Grant
URG	Undergraduate Research Grant

Message from Deputy Dean- Academic Affairs and Research



Research has recently gained a lot of significance among the College members, notably within the past few years. Our statistics show a steady growth in the number of journal and conference publications, as well as other research activities. Our members' foci have shifted towards quality journals and conferences indexed in and/or abstracted by well-known databases such as Scopus and ISI. Since the revision of the Research Department (RD) objectives in 2018 as well as the Operational Plan of the Centre, all our efforts have been reoriented towards ensuring that the conceptualised objectives are achieved on time and properly.

We have created research groups to foster academic excellence by promoting high-impact research in innovative areas of relevance to local society, the region, and the world, to increase research output and international collaborations. Research Groups provide a platform for faculty members with intersecting interests to exchange ideas and develop research initiatives. In addition, a Best Research Award has been introduced to encourage the members to do more quality research, rather than focusing on the quantity. Since 2018, we have actively submitted research proposals to The Ministry of Higher Education, Research & Innovation (MoHERI), among which, many collaborations at both national and international levels are established. These are only a few examples of our recent achievements in terms of research in the past years.

I hope the information in this report is useful to our researchers and other members of the College. The Research Department would be glad and open to receive any feedback or comments from students, faculty members, researchers and partners worldwide to enhance the quality of research.

Dr. Ali Al-Badi

Deputy Dean- Academic Affairs and Research (DDAAR)

Research Objectives

The following figure shows the research objectives of the College for the upcoming four years:



Figure 1: Gulf College Research Objectives

Research Strategic Change Agenda

The following diagram shows where we currently are and where we need to be in the very near future:

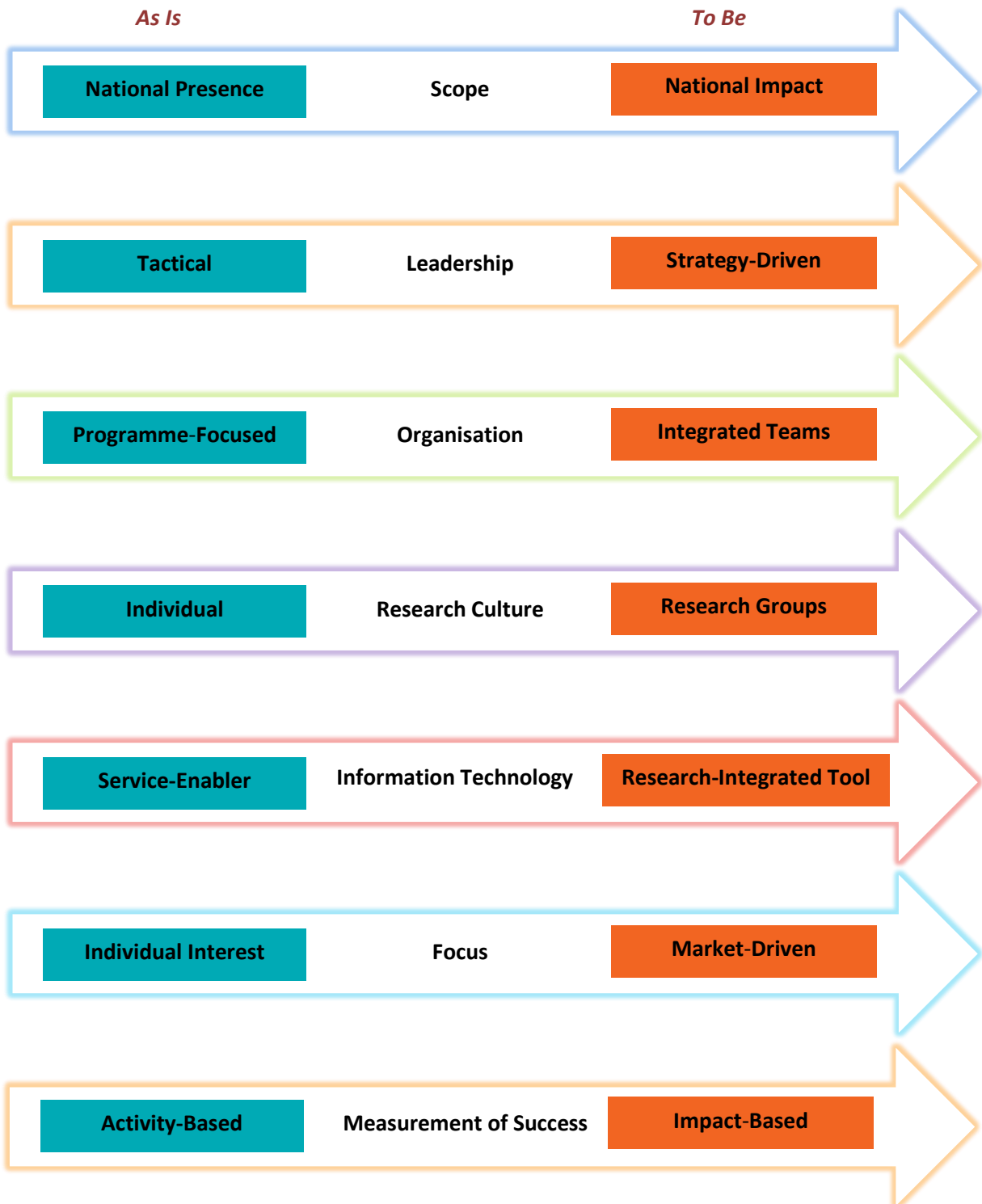


Figure 2: Gulf College Research Strategic Change Agenda (adapted from Kaplan & Norton, 1996)

Staff and Student Publications

Centre for Foundation Studies

Journal Publications

Nouraey, P., Al-Badi, A., Riasati, M.J., & Maata, R.L. (2020). Educational program and curriculum evaluation models: A mini systematic review of the recent trends. *Universal Journal of Educational Research*, 8(9), 4048 - 4055.

Nouraey, P., & Behjat, F. (2020). Students Attitudes towards Written Error Corrections: A Study in Omani EFL Context. *International Journal of English Language and Literature Studies*, 9(3), 210-218.

Mallillin, L. L. D. (2019). Feedback on the performance of students in their information technology module. *London Journal of Research in Computer Science and Technology*, 19(2), 11-20.

Ancheta, R. F., Simagala, E. E., & Daniel, M. D. (2019). Challenges encountered by EFL tutors of Academic Study Skills module: A pedagogical point of view. *International Journal of Social Science and Technology*, 4(5), 1-13.

Conference Publications

Adarbah, H. (2020, February). *Active learning for at-risk students through educational technology*. Paper Presented at The 1st International Conference on Teaching and Learning in Higher Education, Muscat, Oman.

Millillin, L.L.D. (2020, February). *Assessment of the general study skills performance of the students in the CFS*. Paper presented at Spain International Conference on Educational Research and development, Valencia, Spain.

Faculty of Business and Management Studies

Journal Publications

Velasco, R. (2019). The Formative blend of culture and education in entrepreneurial development. *International Journal of Recent Technology and Engineering*, 8(4), 236-241.

Velasco, R. M. (2019). Factors Associated with Failure in Accounting: A Case Study of the Omani Students. *International Journal of Higher Education*, 8(6), 157-170.

Getaruelas, R. (2019). Impact of digital marketing in tourism in Oman. *Journal of Advanced Research in Dynamical and Control Systems*, 11(05-Special Issue), 1936-1945.

Getaruelas, R. (2019). Competencies, skills and training needs of hospitality firm employees in Oman towards promotion: An inquiry. *International Journal of Innovative Technology and Exploring Engineering*, 8(11S2), 442-447.

Conference Publications

Getaruelas, R. (2020, August). *Promotional practices analytics of retail stor in Oman: A case study*. Paper Presented at The 5th International Conference on Management, Engineering, Science, Social Science and Humanities (iCon-MESSH'20), Peneng, Malaysia.

Getaruelas, R. (2020, August). *Exemplification of entrepreneurial intentions and competencies of business students in Oman* . Paper Presented at The 5th International Conference on Management, Engineering, Science, Social Science and Humanities (iCon-MESSH'20), Peneng, Malaysia.

Ancheta, R.F. (2020, February). *Review on the delivery of general study skills module: A tutor's experience*. Paper Presented at Spain International Conference on Educational Research and Development (SICERD-2020), Valencia, Spain.

Faculty of Computing Sciences

Journal Publications

Veningston, K., Kadry, S., Kalash, H. S., Balamurugan, B., & Sathiyaraj, R. (2020). Intelligent social network based data modeling for improving health care. *Health and Technology*, 10(1), 321-332.

Al-Badi, A., Tahrini, A., & Al-Bolushi, H. (2020). Adoption of social media for public relations professionals in Oman. In *ICT for an Inclusive World* (pp. 229-247). Springer, Cham.

Al-Badi, A., Tarhini, A., & Al-Mawali, H. (2020). The challenges faced during the implementation of smart schools in Oman. In *ICT for an Inclusive World* (pp. 373-389). Springer, Cham.

Halibas, A.S., Maata, R.L., Varusai, M.A.K., Al-Badi, A., & Nouraey, P. (2020). Design of a knowledge management system for the research-teaching nexus: Evidence from institutional audit reports. *Issues in Informing Science and Information Technology*, 17, 21-40.

Halibas, A. S., Mehtab, S., Al-Attili, A., Alo, B., Cordova, R., & Cruz, M. E. L. T. (in press). A thematic analysis of the quality audit reports in developing a framework for assessing the achievement of the graduate attributes. *International Journal of Educational Management*.

Al-Badi,A., Sharma, S.K., Khan, A.I., & Govindaluri, S.M. (in press). Global and local perspective on the usage of mobile wallet. *International Journal of Business Information Systems (IJBIS)*.

Channoufi, I., Najar, F., Bourouis, S., Azam, M., Halibas, A.S., Alroobaea, R., & Al-Badi, A. (2020). Flexible statistical learning model for unsupervised image modeling and segmentation. Bouguila N. and Fan W. (eds.). *Mixture Models and Applications: Unsupervised and Semi-Supervised Learning*, Cham, Springer.

Khan, A. I., Al-Badi, A., & Al-Kindi, M. (2019). Progressive web application assessment using AHP. *Procedia Computer Science*, 155, 289-294.

Conference Publications

Maata, R.L. (2020, April). *Performance analysis of Twofish cryptography algorithm in B16 data*. Paper Presented at 2020 9th International Conference on Software and Information Engineering, Cairo, Egypt.

Bourouis, S., Najar, F., Alshar'E, M., Alroobaea, R., Bouguila, N., & Al-Badi, A. (March,2020). *Efficient statistical learning framework with applications to human activity and facial expression recognition*. Paper presented at The 5th International Conference on Advanced Technologies for Signal & Image Processing (ATSIP'2020), Sousse, Tunisia.

Cordova, R. (2020, March). *A model and framework for alumni tracking and information system*. Paper Presented at International Conference on Science, Technology, Engineering and management, Los Angeles, USA.

Halibas, A.S., Cherian, A.M., Pillai, I.G., Reazol, L.B., Delvo, E.G., & Sumondong, G.H. (2020, January). Web ranking of higher education institutes: An SEO analysis. Paper Presented at International Conference on Computation, Information and Knowledge Management (ICCAKM-2020), Dubai, UAE.

Cordova, R. S., Maata, R. L. R., & Halibas, A. S. (2019, November). Blowfish algorithm implementation on electronic data in a communication network. Paper presented at 2019 International Conference on Electrical and Computing Technologies and Applications (ICECTA), Ras Al Khaimah, UAE.

Al-Abri, R.N.H., Shaikh, A.K., Smith, L.G., & Al-Badi, A. (November, 2019). Designing of a framework for electronic voting systems using blockchain technology. International Business Information Management Conference (34th IBIMA), Madrid, Spain.

Al-Harrasi, A.s., Al-Badi, A.H., & Khalique, S.A. (November, 2019). Blockchain to eliminate intermediaries: Smart contracts. International Business Information Management Conference (34th IBIMA), Madrid, Spain.

Al-Farsi, K.M.S., Al-Badi, A.H., & Khalique, S.A. (November, 2019). Behavioral intention for adopting blockchain in supply chain management: Case study in Oman industry. International Business Information Management Conference (34th IBIMA), Madrid, Spain.

Current Research Status

The Following table aims at highlighting the number of journal and conference publications within each faculty. The table shows how research has progressed in Gulf College within the last five years.

Table 1: Number of Journal and Conference Publications at Gulf College

Faculty	Academic Year	Number of Journal Publications	Number of Conference Publications	Total
Centre for Foundation Studies	2019-2020	4	2	6
	2018-2019	4	4	8
	2017-2018	4	10	14
	2016-2017	13	10	23
	2015-2016	9	6	15
Faculty of Business and Management Studies	2019-2020	4	3	7
	2018-2019	9	5	14
	2017-2018	0	5	5
	2016-2017	11	3	14
	2015-2016	8	4	12
Faculty of Computing Sciences	2019-2020	8	10	18
	2018-2019	1	6	7
	2017-2018	2	10	12
	2016-2017	5	1	6
	2015-2016	3	7	10

This figure shows the frequency of journal and conference publications in each faculty/centre per academic year within the past 10 years.

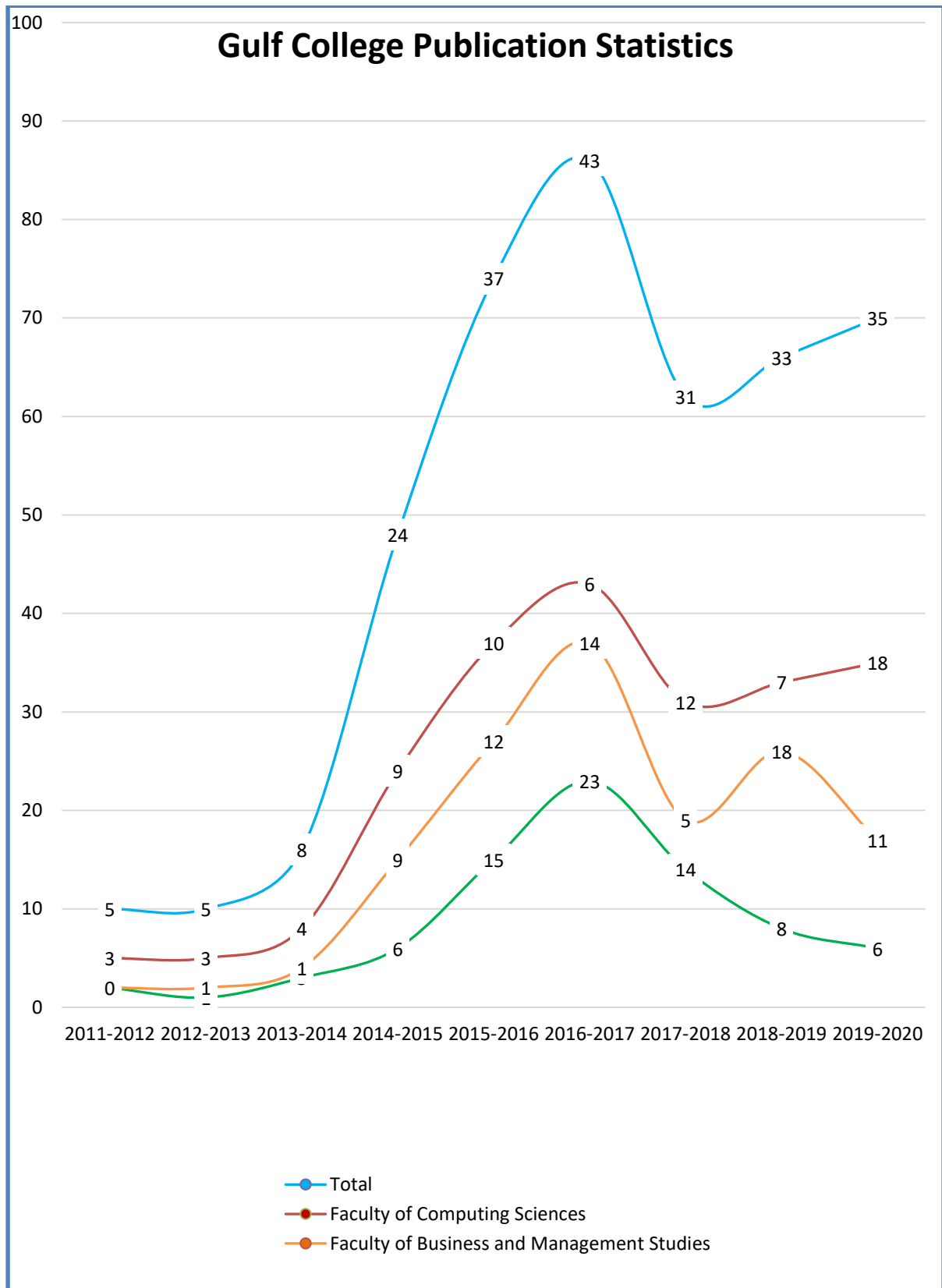


Figure 3: Number of Journal and Conference Publications at Gulf College

Research Workshop

Table 2: List of Research Workshops Conducted at Gulf College

No.	Title of the Workshop	Target Audience	Date
1	An orientation Session on the Research Framework and the Intellectual property Policy	Academic Staff	7 November 2019
2	MoHERI's Block Funding Programme Guidelines All Staff	All Staff	15 October 2019
3	Research Progress (as part of Staff General Meeting)	All Staff	29 April 2019
4	Mendeley Software: Add Your References and Citations with Few Clicks	Interested Researchers	25 April 2019
5	A Workshop on Research Funding Schemes (MoHERI Funds and Internal Grants)	CFS Staff	28 March 2019
6	A Workshop on Research Funding Schemes (MoHERI Funds and Internal Grants)	FBMS Staff	14 March 2019
7	A Workshop on Research Funding Schemes (MoHERI Funds and Internal Grants)	FCS Staff	14 March 2019

MoHERI-Funded projects

One of the most significant research achievements was the funding of several research projects by The Ministry of Higher Education, Research & Innovation (MoHERI). The following projects have been approved under the Block Funding programme (BFP), submitted during two (2018 and 2019). For Call 2020, 9 research proposals have been approved by the Research Committee (RC) and submitted to MoHERI, the results of which will be publicised in the next annual report. The following table aims at providing the details of the research projects approved for funding by MoHERI under the BFP as of now:

Table 3: Details of MoHERI-Funded Research Projects

No.	Researchers	Project Title	Programme
1	PI: Ali Al-Badi, Gulf College, Muscat, Oman Co-PI: Vishal Jain, College of Education, Rustaq, Oman Co-Is: Sujeet K. Sharma, Manisha Sharm, Indian Institute of Management, Tiruchirappalli, India	Impact of Emerging Technologies in Smart City Solutions in Oman	2018 Block Funding Programme (BFP)/ Research Grant
2	PI: Rolou Lyn Maata, Gulf College, Muscat, Oman Co-PI: Alrence S. Halibas, Gulf College, Muscat, Oman Co-Is: Rizwan Ahmed, Gulf College, Muscat, Oman Mohammed Varusai, Gulf College, Muscat, Oman Earl Peter Gangoso, Freelance Researcher Sarah Mae Engcoy, La Salle University, Philadelphia, USA	Building Virtual Communities of Scholars Towards the Improvement of the Research-Teaching Nexus using a Knowledge-based Research Management System	2018 BFP/ Research Grant
3	PI: Alrence Halibas, Gulf College, Muscat, Oman Co-PI: Ali Al Badi, Gulf College, Muscat, Oman Co-Is: Sami Bourouis, Taif University, Taif, Saudi Arabia Muhammad Azam, Concordia university, Montreal, Canada Roobaea Alroobaea, Taif university, Taif, Saudi Arabia Ines Channoufi, University DE Tunis El Manar, Tunis, Tunisia	Developing an Effective Mixture Machine Learning Model for Improved Image Modelling and Analysis	2018 BFP/ Research Grant

No.	Researchers	Project Title	Programme
4	PI: Ronald S. Cordova, Gulf College, Muscat, Oman Co-PI: Rolou Maata, Gulf College, Muscat, Oman Co-I: Ferdinand Epoc, Gulf College, Muscat, Oman Alrence Halibas, Gulf College, Muscat, Oman	Alumni Tracking Information System (ATIS) Towards the Attainment of Quality Programmes	2018 BFP/ Research Grant
5	PI: Marwan Al Share, Gulf College, Muscat, Oman Co-PI: Ali Al Badi, Gulf College, Muscat, Oman Co-I: Sami Bourouis, Taif University, Taif, Saudi Arabia Roobaae Al Roobaea, Taif university, Taif, Saudi Arabia Nizar Bouguila, Concordia university, Montreal, Canada	Online Human Activity and Facial Expression Recognition Using Efficient Statistical Learning Framework	2018 BFP/ Research Grant
6	PI: Ali Al Badi, Gulf College, Muscat, Oman Co-PI: Rolou Lyn Maata, Gulf College, Muscat, Oman	Oman's General Foundation Program and National Learning Outcome Standards: Insights From the Computing Element	2019 BFP/ Research Grant
7	Faculty Mentor: Nasrin Sulthana, Gulf College, Muscat, Oman Team Leader: Samya Salim Said AL Dugashy (Student ID: 1710335) Other Members: Yousuf Mohammed Salim Al Rashdi (Student ID: 1710671) Nawaf Darwish Fairiya Al Bulushi (Student ID: 1610459) Salma Ibrahim Mohammed Al Bulushi (Student ID: 1610347)	4 p's to 4E's – How to avoid the risk of unbalancing Marketing Mix to bring development in tourism in Oman	2019 BFP/ Undergraduate Research Grant

No.	Researchers	Project Title	Programme
8	PI: Marwan Alshar'e Co-PI: Ali Al Badi Co-I: Noman Tahir	Usability Evaluation of Educational Games and Introducing New HCI Design based educational games for Omani Students that fit Omani Culture	2019 BFP/ Research Grant

Internal Grants

In 2019, Gulf College introduced the Internal Grants (IGs) in order to support its staff in doing quality research. The following table shows the details of the IG proposal funded by the College:

Table 4: Details of the Research project Approved for the Internal Grant

No.	Researchers	Project Title	Programme
1	PI: Peyman Nouraey, Gulf College, Muscat, Oman Co-PI: Jenna Engelhart, Gulf College, Muscat, Oman	Evaluating General Foundation Program in Oman through Kirkpatrick's Four Level Model	Internal Grant (IG)

