



UNIVERSITY
OF
JOHANNESBURG

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

CENTRE OF APPLIED RESEARCH AND INNOVATION IN THE BUILT
ENVIRONMENT

CHARTER



CENTRE OF APPLIED RESEARCH AND INNOVATION IN THE BUILT ENVIRONMENT

SCHOOL OF CIVIL ENGINEERING AND THE BUILT ENVIRONMENT	
Custodian	The Executive Dean, Faculty of Engineering and the Built Environment
Responsible Division	School of Civil Engineering and the Built Environment
Status	Approved by the Faculty Board of Engineering and the Built Environment.
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ABBREVIATIONS

CARINBE	:	Centre of Applied Research and Innovation in the Built Environment
CBE	:	Council for the Built Environment
CIDB	:	Construction Industry Development Board
CPD	:	Continuous Professional Development
FEBE	:	Faculty of Engineering and the Built Environment
HOD	:	Head of Department
MBA	:	Master Builders Association
MOA	:	Memorandum of Agreement
NRF	:	National Research Foundation
SCEBE	:	School of Civil Engineering and Built Environment
SLP	:	Short Learning Programme
UJ	:	University of Johannesburg

1 THE CENTER

1.1 Name and Status

The Centre of Applied Research and Innovation in the Built Environment (CARINBE) is set up within the School of Civil Engineering and Built Environment (SCEBE), under the governance rules and structures of the University of Johannesburg (UJ). The custodian of the Centre is the Executive Dean of the Faculty of Engineering and Built Environment (FEBE). The Centre is situated on the Doornfontein Campus within the Department of Construction Management and Quantity Surveying.

1.2 Strategic Intent

The CARINBE'S strategic intent is to become an internationally recognized think-tank, established to provide credible information to the built environment industry which is supported by robust scientific research.

1.3 Objectives and Functions

The objectives of CARINBE are to:

- Conduct and publish research reports on the status, challenges and success strategies in the built environment industry;
- Contribute to national policy briefs and analysis on the industry;
- Provide expert advice to the built environment industry;
- Participate in the national development planning initiatives related to the built environment profession with a view of providing credible feedback on performance.

The establishment of the research Centre is intended to achieve the following:

- Set-up a sustainable and operational research center, which will also be a knowledge repository for the built environment;
- Develop both long and short-term research agenda which is built environment specific;
- Become a resource and supportive structure for young and emerging researchers in the built environment;
- Attract top postgraduate students and post-doctoral fellows to conduct research at UJ in the field of the built environment
- Become a vehicle for research projects commissioned by the Council for Built Environment (CBE), South Africa;
- Provide community service by conducting short learning programmes so as to provide Continuous Professional Development (CPD)

1.4 Community service

- Training provided through short learning programmes to promote CPD
- Participate in the Work Integrated Learning (WIL) and Internships

1.5 Motivation

The set-up of CARINBE is motivated by the following considerations that:

- The UJ has, as one of its actions to achieve the research strategic goals by reorganizing research structures through formation of new centers and research niche areas;
- The UJ has an opportunity and is well positioned to lead the built environment sector on research in this sector;
- A Memorandum of Agreement (MOA) between the UJ and the CBE has already been signed

- by the two parties to collaborate on research in the built environment industry;
- Master Builders Association (MBA), North and other contracting firms in the industry have endorsed and are supportive of the initiative to establish a built environment research Centre at the UJ;
- The built environment does not have a center of excellence which is registered with the National Research Foundation (NRF);
- Research projects will cut across all disciplines within SCEBE and therefore enhance collaborative efforts within the school at UJ.

1.6 Structure and Staff

For the purpose of establishing and operationalizing the research center, a director is appointed. The director's responsibility is to provide overall management and operation of the center. The position of director is assumed by a senior person with industry connections. In addition, an assistant to the director is appointed once the center becomes operational.

The structure of the CARINBE is as follows:

1.6.1 The Director

The Director is the accounting officer for all research projects procured by the Center. He / She reports to the Management Board comprised of Heads of Departments (HODs), the Head of SCEBE, the Executive Dean and to the Faculty Board.

1.6.2 Researchers

- **Research Specialists:** consist of be the UJ Staff from the SCEBE or visiting senior researchers. Their role is to lead specific research projects procured by the research center;
- **Postgraduate students:** are Masters and Doctoral students recruited to work with research specialists on specific research projects and
- **Post-Doctoral Fellows:** are recruited to work with research specialists on specific research projects.

2 MANAGEMENT

2.1 Composition

The Management Committee will comprise the following members (or their nominees):

- Executive Dean of FEBE (Ex-officio);
- Vice Dean of Postgraduate Studies, Research and Innovation-FEBE (Ex-officio);
- Head of SCEBE;
- Director of CARINBE;
- HoDs under the SCEBE;
- Three elected SCEBE permanent or contract staff members;
- Three representatives from CBE and
- Co-opted persons relevant to specific projects.

The general management structure of the center is shown in Fig 1. Members of the Management Committee serve an initial term of four (4) years. The Faculty through SCEBE may re-appoint members or extend an existing membership thereafter. Any Conflict of Interest must be declared as

and when it arises.

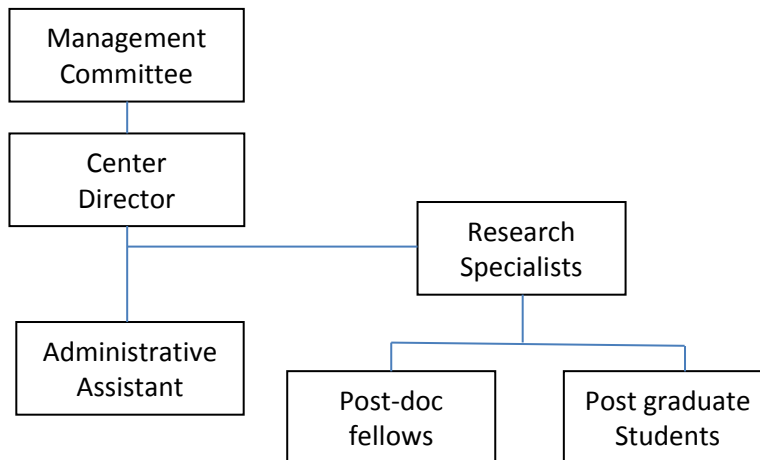


Fig 1: Management structure of CARINBE

2.2 Meetings

- The Management Committee will meet every four (4) months, at a date and time to be determined by the chairperson;
- Fifty percent (50%) of the members constitutes a quorum;
- Each member has an equal vote, but the Chairperson has a casting vote. All decisions are taken by majority vote;
- Meetings are conducted in accordance with UJ's guide;
- Principles of good governance are upheld and
- The chairperson may call an extra-ordinary or emergency meeting in accordance with the rules.

2.3 Role and Function

The Management Committee acts on behalf of FEBE and CBE to provide strategic guidance to the Director of the Centre and to researchers. The Centre will report annually to the Faculty Board of FEBE.

3 AMENDMENTS AND DISSOLUTION

Any amendments to CARINBE shall be made by the Management Committee of the Centre when considered appropriate. Dissolution of CARINBE can be taken at any point deemed appropriate, by the UJ in consultation with CBE.

4 RESOURCES

4.1 Facilities

The Centre will house computers equipped with research software and connected to UJ's library system. Documentation resulting from the research activities will be availed through the UJ's institutional repository and will contribute towards the university's research output.

4.2 Funding

Finance for the proper running of the research center will be generated from these and other project activities:

- Collaborative research with the CBE;
- Partnerships with the built environment industry organisations such as contracting firms and the MBA;
- Contract research;
- Conducting specialized SLPs.

4.3 Budget

The budget for the center covers the following aspects:

- Setting up and running of the Centre and its attendant units.
- Medium and long - term research projects. Detailed budget for long-term research projects will be presented on a project-by-project basis;
- Bursaries for postgraduate students

5. PROJECTS

The potential projects to be undertaken by the Centre are identified periodically. The projects will, amongst others, relate to training of built environment professionals, revitalization of the built environment industry, integration of infrastructure development, and implementation of health and safety in the construction industry.

ATTACHMENTS

Annexure 1: Background

Annexure 2: Budget

Annexure 3: Staffing

ANNEXURE 1: BACKGROUND

Although the built environment industry is one of the largest contributors to South Africa's Gross Domestic Product (GDP), it is one of the few industries in the country which do not have a dedicated central repository of knowledge to inform its development. The built environment and in particular, the construction industry has unique characteristics that compound its complexity and pose a challenge to performance improvement including the fact that it:

- Employs large number of workers who have to combine a diverse range of skills to complete a project (Bomel, 2001; Dainty, et al., 2001; Riley & Clare-Brown, 2001; Pellicer & Molenaar, 2009);
- Is a fragmented industry (Egan, 1998; Chan et al., 2004);
- Is an industry subjected to cyclical economic downturns (Egan, 1998; Dainty, et al., 2001);
- Is an industry with a low and unreliable rate of profitability (Egan, 1998:7; Pellicer & Molenaar, 2009);
- Is an industry with poor safety performance (CIDB, 2008);
- Suffers from skills shortage (Engineering News, 2014), and
- Has high levels of corruption and unethical conduct (Bowen & Cattell, 2012)

These characteristics indicate the scale of industry when compared to other sectors of the economy, which in comparison to the construction industry have experienced tremendous improvement in many aspects.

In an attempt to address the many challenges facing the built environment in South Africa, the CBE and UJ Department of Construction Management and Quantity Surveying, have identified the creation of a Research Centre to be a key initiative that would contribute toward the construction industry improvement. Through the Centre, CBE and UJ will collaborate in research and set up a repository of knowledge on the industry.

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ANNEXURE 2: BUDGET

The budget in Table 1, caters for the running of the Center for the next five years. It also provides for staff , anticipated bursaries and fellowships.

Table 1. Five year budget

Budget Item Description	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Setting up and running of the Centre	250,000	255,000	293,250	322,575	338,704
Research Centre staff-Assistant	120,000	214,000	228,980	251,878	277,066
Bursaries and Fellowships		360,000	540,000	720,000	945,000
Medium and long term research projects.	Project specific budgets will be determined commensurate with resources needed.				
TOTAL COST	370,000	829,000	1,062,230	1,294,453	1,560,770

ANNEXURE 3: STAFFING

The list below gives the staff members from SCEBE who are currently part of CARINBE

NAME	EMAIL	PHONE NO.	OFFICE NO.
Dr I. Musonda (Group Leader)	imusonda@uj.ac.za	0115596655	6151 , John Orr, DFC
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