

B. V. V Sangh's Basaveshwar Engineering College (Autonomous) Bagalkot – 587103, Karnataka, India

# **Institutional Strategic Plan**

An extensive SWOC Analysis of the institution has been carried out and the details of analysis are provided herewith.

### The SWOC Analysis of the Institution

Resource centric approach is adopted for SWOC analysis (Strengths, Weaknesses, Opportunities, and Challenges) to evolve a comprehensive strategic plan for institutional development. The five resources are Human, Organizational, Technological & Infrastructural, Relational and Financial. Strengths and Weaknesses are considered as internal while Opportunities and Challenges as external.

SWOC analysis of Basaveshwar Engineering College is carried out with meticulous efforts of representatives from all stakeholders. A core committee, consisting of Principal, Heads of Departments and three faculty members from each department, was formed to participate in SWOC analysis. Services from Department of Management Studies, IIT Madras were sought to train the core committee for carrying out the college SWOC analysis. The outcomes of SWOC analysis such as Vision, Mission, Values and Quality Policies are the result of more than 1000 person days of the BEC core committee. These outcomes are presented below.

#### Vision, Mission, Values and Quality Policy

#### Vision

To be recognized as a premier technical institute committed to developing exemplary professionals, offering research based innovative solutions and inspiring inventions for holistic socio-economic development

#### Mission

To pursue excellence through student centric dynamic teaching-learning processes, encouraging freedom of inquiry and openness to change

To carry out innovative cutting edge research and transfer technology for industrial and societal needs

To imbibe moral and ethical values and develop compassionate, humane professionals

#### Values

Work is Worship	The core essence of every activity of the college is inspired by the life and saying of Lord Basaveshwara the visionary of 12 <sup>th</sup> century. The "Basaveshwara Engineering College" is named after the visionary		
Student Centric	Academic and Administrative processes are devised and practiced to be student centric		
Innovation	Encourage innovation and research for betterment of society		

Learning Centric	To inculcate lifelong learning through teaching-learning and research activities
Empathetical Campus Culture	Cordial and harmonious living on campus through empathy
Indian Ethos	Nurture modern outlook imbibed with Indian ethos in BEC community

#### **Quality Policy**

Teaching-Learning, research, administrative processes are quality driven and embellished with continuous improvements (Kaizen) to meet the global standards by rigorous adherence to set procedures and exhaustive quality audits.

This will be achieved through:

- Continuous upgradation of qualification/ skills of faculty/staff and infrastructure
- Teaching-learning and mentoring with enhanced quality management system
- Providing multiple study options through perfect blend of academic flexibility and research emphasis
- Involvement of people at all levels

## **Details of SWOC Analysis:**

	Code	Strengths	Code	Weaknesses
	BASK01	Qualified and experienced faculty:	BAWK01	Some faculty need
		Doctorates (30%), pursuing Ph.D (11%),		qualification up-
		Postgraduates (65.4.0%). Some of the		gradation
		national/ state level awarda/ honors/		
		prizes/recognitions (05)		
		Average professional experience of		
		faculty – 15 years		
	BASK02	Expertise in multidisciplinary knowledge	BAWK02	Need to enhance the
		areas:		skills of faculty to
		Energy: Power Systems, Renewable		latest technologies
		Energy systems, Alternate fuels for		
e		diesel engines		
edg		and Pollution Studios Subsurface Flow		
w		and Contaminant Transport		
<b>čn</b> o		Materials: High strength and high		
ł		performance concrete. Material Science		
		and metallurgy, FRP composites		
		Computers: Soft computing, vision and		
		mobile computing		
		Communications: Signal Processing,		
		Speech recognition, Computer		
		Communication and Networking,		
		MEMS		
		Analysis & Design: Manufacturing and		
		Machine design Disaster management		
		Farthquake resistant design		
		Manufacturing		
		Management: Entrepreneurship		

	BASK03	High quality of student output has led to	BAWK03	Need to strengthen
	DIIGINO	increased career placement offers from	DITUIROS	inter-institute inter-
		reputed companies		department research
		reputed companies		activities and
				activities and
				research with
				industry/ R&D Labs
·		Some high performing students have	RAWK04	Need for knowledge
	RASK04	demonstrated notential for advanced	DITTIN	un-gradation in some
	DIGINO	learning and research through		specialized areas_
		specialized areas of Material technology		FPGA system
		SCADA systems PLC applications in		dynamics
		Industry climate change &		dynamics
		sustainability remote sensing & GIS		
		FRPC cryogenic machining and product		
		life cycle		
	RASK05	Competent Technical staff_ Instructors	RAWK05	Low rank student
	DADIKUS	Asst instructors and Mechanics – trained	DITUIROS	input
		for skill enhancement in TEOIP phase-		mput
		I& II		
		Average working experience of staff -		
		18 years		
	BASS06	Faculty use new educational technology	BAWK06	Inbreeding of faculty
		hardware/devices and employ innovative		
		teaching-learning methodologies		
	BASS07	Core competencies in (i) organization of	BAWS07	Need for skill
		international conferences/ seminars/		upgradation of
		workshops -(5); (ii) organization of		faculty/ technical
		national/ state level conferences/		staff
		seminars/ workshops - (110) and (iii)		
		continuing education programmes for		
		working professionals (30)		
	BASS08	Preparation of Project Proposals:	BAWS08	Need additional
		received research grants from AICTE		exposure to IPR
		(7), DST (1), KSCST (5), VTU (5),		competencies
		VGST (5), NRB (1), TEQIP II		
		(3),KSBDB (2) MHRD (4).		
cill	BASS09	Faculty use IT (information technology)	BAWS09	Need additional
$\mathbf{S}$		software tools like modeling, analysis,		exposure to learning
		simulation, and design for teaching		material preparation
		learning and research.		for digitized content
	D L CC40			development
	BASS10	Guiding UG, PG and research projects,		
		which are innovative and need based.		
	DACC11	Expertise in technical writing: Teaching		
	DA5511	Expertise in technical writing: Teaching		
		hooks (10) papars in international &		
		pational journals (422)		
	PASS12	Expertise in documentation counseling		
	DA0012	consultancy and professional services		
	Code	Strengths	Code	Weaknesses
	BASC13	Synergistic team of young and	Couc	vv cumesses
• .	2110 010	experienced faculties who are committed		
ter		to intellectual pursuits, professionally		
ra(		enthusiastic, and enjoy working in		
ha		interdisciplinary teams.		
$\mathbf{C}$	BASC14	Affection and Concern towards students:		
		Faculty counsel and mentor students in		
		academic and non-academic issues.		

BASC15	Care and diligence in maintenance and review of academic records at faculty	
	level: Faculty maintain subject files,	
	results and student feedback analysis in	
	compliance with academic systems and	
	procedures	
BASC16	Intellectual Enthusiasm: Faculty and	
	students are keen to contribute towards	
	research, technical publications and	
	societal causes by often staying on	
	campus beyond working hours	
BASC17	Eagerness to deliver more than the	
	stipulated requirements in academic and	
	administrative responsibility and	
	openness to alternative viewpoints in	
	discussions	
BASC18	Mutual trust and positive attitude of	
	faculty and staff	

#### **Technological and Infrastructural Resources**

	<b>O</b>		
Code	Strengths	Code	Weaknesses
BAST19	Research facilities with sophisticated		
	instruments enhanced through AICTE		
	(Rs. 61.83 lakhs), DST (Rs. 5 lakhs), VTU		
	(Rs. 76.89 lakhs), TEQIP-II (Rs. 49.88Lakh),		
	NRB (Rs.42.48Lakhs), VGST (Rs.84.4 Lakh),		
	KSBDB (Rs.13.5 Lakh), MHRD (Rs. 24		
	Lakh)		
BAST20	Departments are equipped with State-of-art		
	laboratories [Strengthened by TEQIP phase-I		
	(Rs. 15.16 crores) and phase-II (Rs. 12 crores		
	with additional Rs. 5 crores)], air conditioned		
	seminar halls, computer centers, library,		
	printing, reprographic, EPABX for internal		
	communication and basic amenities		
	Adequate working space: faculty cabins with		
BAST21	PCs, staff rooms, classrooms, laboratories,		
	office, departmental libraries, centralized		
	facilities: digital library, centralized		
	computing facility, multimedia seminar		
	halletc.		
BAST22	Campus Amenities: Auditorium, Open Air	BAWT10	Need for giving
	Theater, Canteen, Hostels for boys and girls,		architectural facelift to
	Banks, Co-operative store, Campus clinic,		buildings
	Placement office, Gymkhana - Playgrounds,		
	multi-gym & indoor stadium, generators, RO		
	plant for drinking water		
BAST23	Wi-Fi campus: Web enabled classrooms, 10		
	Gbps fiber optic backbone Campus Wide		
	Network (CWN), with pervasive Wi-Fi		
	network and 100 Mbps leased line internet		
	connection, Multi media seminar hall		

BAST24	Excellent distributed computing facilities with	
	8 high-end servers, more than 1400 PCs and	
	laptops	
BAST25	Good library facility: Common reading room,	
	access to e-books and online journals	
	throughout the campus	

## **Organizational Resources**

Code	Strengths	Code	Weaknesses
BASO26	Well-designed organization structure	BAW011	Documentation of policies,
	with clearly specified administrative		systems, and operational
	roles and operational procedures - in		procedures needs to be
	conformance with KCSR (Karnataka		strengthened
~ ~ ~ ~	Civil Services Rules)		
BASO27	Active and clearly defined bodies for		
	institutional functioning - Board of		
	Governors (BOG), Academic Council		
	(AC), Departmental Board of Studies		
	(BOS) and Board of Examination (BOE), Finance Committee Grievances		
	Redressal Committee Fauivalence		
	Committee etc., as per UGC guidelines.		
	Existence of Management Information		
	System/s (MIS)		
BASO28	Periodic review and revision of	BAW012	Some faculty over burdened
	curriculum in tune with industrial needs		with administrative and non-
	and well-established examination and		academic activities
	evaluation processes		
BASO29	Clearly specified calendar of events and	BAW013	Frequency and intensity of
	strict adherence to it		academic and administrative
			audits at departmental level to be
RASO30	Empethetic and supportive management	RAW014	Bonchmarking required with
DASUSU	Empatiente and supportive management	DAW014	other academic departments/
			organizations
BASO31	Policies for Faculty and Staff	BAW015	Necessity to reframe the write-
	development: Deputation for higher		off procedures for obsolete
	studies, training programmes, short-term		equipment
	courses and International/National		
	conferences.		
	Incentives for authoring books, receiving		
	grants for projects and publishing in peer		
DASO22	reviewed international journals.	DAW016	Paguirad to increase the
DA5052	financial assistance for attending project	DAW010	involvement of HOD's and
	exhibitions/ student contests incentives		senior faculty in institute level
	to students, scholarships for the		planning and budgeting
	meritorious and socially deprived		F
	sections		
BASO33	Remedial classes for academically weak	BAW017	Need for decentralization and
	students: Counseling/ Mentoring of all		financial autonomy
	students		
BASO34	Student forums in each department	BAWO18	Complete and accurate records
	provide platform for extra and co-		of fixed assets to be maintained
	curricular activities for overall		
	personality development		

BASO35	Existence of well-established STEP &
	CED:
	Science and Technology
	Entrepreneurship Park Est. 1999,
	National award for best STEP in 2006-07
	Centre for Entrepreneurship
	Development Cell Est.2006.

### **Relational Resources**

Code	Strengths	Code	Weaknesses	
BASR36	Student chapters of professional bodies:	BAWR19	Need for increasing	the
	ISTE, IEEE (183 student members.		institutional memberships	to
	Est.1994), IEEE-WIE (est.2010), PES		professional bodies	
	chapter (est.2016 with 6 Faculty & 13			
	Students)provide platform for academic			
	and professional networking			
BASR37	Cordial and mutually beneficial			
	relationship with university, state			
	government, professional bodies,			
	community, alumni, and parents			
	(Faculty are members of Academic			
	senate, BOS, BOE, Govt. Bodies)			
BASR38	Professional Networking:			
	Institutional Memberships to			
	professional bodies such as ISTE, KRVP			
	Faculty are active members of			
	recognized professional bodies, such as			
	IEEE (2 senior members 13 members),			
	IGS, ISTE, IE (I), IETE, ISWE, SAE,			
	KRVP, CI (I), BMSI, BSSI, ISSS,			
	YHAI			
BASR39	Institute Interactions: Collaborative			
	research activities and joint publications			
	with Budapest university Hungary, IIT			
	Bombay, NITK Suratkal, NIT Calicut,			
	NIT Rourkela, PSG CET Coimbatore,			
	UOM Mysore, NAL Jamshedpur,			
	DMRL Hyderabad, BITES Bangalore,			
	UBDT Davanagere, Michigan			
	Technological University MI, USA.			
BASR40	Industry Interactions: MoU with			
	BOSCH-Rexroth, KarMic Manipal,			
	TCS, Global Edge Software, UBDT			
	Davanagere, K-cube Consultancy			
	Services, SDS, Oracle Workforce			
	Development, KSBDB, VTU-NOKIA			
	Research, PRDC Bangalore,			
	FLEXITRON Bangalore, Bharat Forge			
	Ltd Pune, NIC Delhi, GEM Sugars			
	Kundaragi and BDK Industries Hubli,			
	Microsoft IT Academy, Wipro			
	Technologies for Mission 10X, AG			
	Electro Services, Pune, DEW Mobiliy,			
	Fremont, California			
BASR41	Alumni Interactions: Several BECAA			
	(Basaveshwar Engineering College			
	Alumni Association) chapters have been			
	established at Goa, Pune, Hyderabad,			
	Bangalore, and Chicago USA, at Dallas.			

## **Financial Resources**

Code	Strengths	Code	Weaknesses
BASF42	Four funds established (Corpus,		
	Maintenance, Faculty Development and		
	Depreciation)		
BASF43	Management provides funds for:	BAWF20	Delay in release of salary grants
	Constructions of buildings, Purchase of		by government for aided
	equipment/s for academic purpose,		departments
	Organizing workshops/ seminars/		
	STTPs, Student Technical Fests and		
	Salaries		
BASF44	Internal Revenue Generation (IRG)	BAWF21	Delay in release of government
	through Consultancy, Training		contribution towards fees for
	Programmes, BEC-STEP activities		SC/ST students
BASF45	Funding from Union and State		
	Government agencies: MHRD, AICTE,		
	UGC, DST, DRDO, VTU, VGST,		
	TEQIP, SERB		
BASF46	Financial support from alumni for		
	construction of Guest house		

## **Opportunities**

BAOP01	Paradigm shift in education system from imparting knowledge to enhancing learning
BAOP02	Emphasis by Government on research in technological areas for socio-economic
	development
BAOP03	Increasing demand for PG courses in specialized areas coupled with scarcity of
	institutes offering such courses
BAOP04	Only Engineering college in the district enjoying high degree of ownership in the
	community
BAOP05	Information Technology revolution and massive demand for engineering
	professionals
BAOP06	Emergence of interdisciplinary research areas and scope for commercialization and
	patenting of research outcomes
BAOP07	Increasing opportunities to present research outcomes in conferences, publish papers
	in journals and patent innovations
BAOP08	Exciting opportunities for collaboration with renowned institutes of higher learning
	and R & D organizations both within and outside India (Foreign University Bill)
BAOP09	Opportunity for developing smart campus with increased availability of
	communication and information technology products
BAOP10	Opportunity for Industry Institution Interaction: i) Industry-Institute Conclaves at
	Bangalore (13-3-2016), Pune (24-04-2016), Hyderabad (26-7-2016), Goa (17-9-
	2016) Mumbai (17-12-2016) ii) Cluster of industries like, cement, steel, sugar,
	service and textile industries in the region provides continuing opportunities for
	employment of graduates and consultancy projects for faculty
BAOP11	Scope for consultancy: Demand for technical expertise to offer advanced
	technological solutions in solving community problems especially energy, ecology
	and environmental issues
BAOP12	Globalization: Opportunity to attract students from different countries and cultures
BAOP13	Requirement for value added training programmes for unemployed rural youth of the
	region
BAOP14	Growth in service sector: Job opportunities for graduates expected to grow
BAOP15	Enhancement of engineering seat intake in multiples of 60 as announced by AICTE
	New Delhi and large difference between UG output and PG intake

## Challenges

BAC01	Mushrooming of engineering colleges in specific locations and possible entry of
	foreign institutions leading to attrition of faculty and staff and undesirable impacts on
	student input

BAC02	Higher fees for technical education leading students to look for other avenues
BAC03	Students with low rank input
BAC04	Many colleges/universities offer fee concession and other incentives to attract good
	CET rank students
BAC05	Frequent changes in education policy

**COWS Matrix for Strategic Objectives** The strategic objectives are framed keeping in view the overall development of the college and are listed in the COWS Matrix.

	Strengths	Weaknesses
	SO Strategies – ExPloit	WO Strategies – ExploRe
	<b>BAEP01:</b> To produce high quality graduates, postgraduates and doctorates in selected academic areas	<b>BAER09:</b> To formulate well-structured auditing procedures (academic, finance and administrative)
	<b>BAEP02</b> : To proactively participate in Government initiated research schemes for socio-economic development	<b>BAER10:</b> Less number of students using the upgraded educational infrastructure and Library using the
	<b>BAEP03</b> : To Strengthen/Enhance MOUs and consolidation of alumni network	Communication Technology (ICT) tools
rtunities	<b>BAEP04:</b> To design and offer skill oriented certificate and value addition programmes to the youth for better employability	
Oppo	<b>BAEP05:</b> To enhance intake in all branches of engineering to strengthen and to establish new, distinctive PG courses	
	<b>BAEP06:</b> To foster innovative thinking in the faculty and students	
	<b>BAEP07:</b> To inculcate spirit of entrepreneurship among students and to provide incubation facility	
	<b>BAEP08:</b> To establish Industrial Consultancy Services Cell (ICSC)	
	ST Strategies – EnGage	WT Strategies – <mark>Es</mark> cape
Challenges	<b>BAEG11:</b> To retain and attract well-qualified faculty and experienced staff	<b>BAES12:</b> To minimize admission of low rank CET students

The strategic objectives developed based on SWOC analysis are mapped and listed in the following table.

Code	Strategic Objectives	Strengths/Weaknesses	Opportunities/ Challenges
P01	To produce high quality graduates, postgraduates and doctorates in selected academic areas	BASK01, BASK02, BASK03, BASK04, BASK05, BASS06, BASS09, BASS10, BASS11, BASC13 BASC14 BASC16	BAOP01, BAOP03, BAOP05, BAOP07, BAOP08
BAE		BASC18, BAST20, BAST23, BAST25, BASO27, BASO28, BASO32, BASO33, BASR36, BASR39, BASR40	
BAEP02	To proactively participate in Government initiated research schemes for socio-economic development	BASK01, BASK02, BASS08, BASS09, BASS12, BASC13, BASC16, BASC18, BAST19, BASO26, BASO30, BASO31, BASR37, BASR38, BASR39, PASE45	BAOP02, BAOP04, BAOP07, BAOP11
BAEP03	To Strengthen/Enhance MoUs and consolidation of alumni network	BAST45 BASK01, BASK02, BASS07, BASC13, BASC16, BASC18, BAST20, BAST23, BASC30, BASO31, BASR38, BASR39, BASR40, BASR41, BASF46	BAOP02, BAOP08, BAOP10, BAOP11,
BAEP04	To design and offer skill oriented certificate and value addition programmes with emphasis on Soft skills and Professional skills to students for better employability	BASK01, BASK02, BASK05, BASS06, BASS07, BASS12, BASC13, BAST20, BAST24, BAST25 BASO34, BASO35, BASF43	BAOP04, BAOP10, BAOP11, BAOP13, BAOP14
BAEP05	To enhance intake in all branches of engineering to strengthen and to establish new, distinctive PG courses	BASK01, BASK02, BASK04, BASS09, BASS10, BASS11, BASC14, BASC16, BASC17, BAST19, BAST20, BAST21, BAST22, BAST23, BAST24, BAST25, BASO27, BASO28, BASO29, BASO30, BASR40, BASR41, BASF42, BASF43	BAOP05, BAOP11, BAOP15
BAEP06	To foster innovative thinking in the faculty and students.	BASK01, BASK02, BASK04, BASS06, BASS08, BASS10, BASS11, BASC16, BAST23, BAST25,	BAOP01, BAOP02, BAOP06, BAOP07, BAOP11,
<b>BAEP07</b>	To inculcate spirit of entrepreneurship among students and to provide incubation facility.	BASK03, BASK04, BASS12, BASC17, BAST25, BASO35, BASR41, BASF44, BASF45, BASF46	BAOP02, BAOP04, BAOP10, BAOP11, BAOP14,
BAEP08	To strengthen Industrial Consultancy Services Cell (ICSC)	BASK01, BASK02, BASS08, BASS10, BASS12, BASC16, BAST20, BASO30, BASO35, BASR37, BASR39, BASR40, BASR41, BASF44,	BAOP02, BAOP04, BAOP06, BAOP10
<b>BAER09</b>	To formulate well structured auditing procedures (academic, finance and administrative)	BAWO13, BAWO15, BAWO17, BAWO18, BAWF20, BAWF21,	BAOP02
BAER10	To upgrade educational infrastructure using the state of the art Information and Communication Technology (ICT) tools.	BAWK02, BAWS09	BAOP01, BAOP09

11	To retain and attract we	I- BAWO12, BAWO14, BAWO16	BAC01, BAC03,
<b>R</b>	qualified faculty an	d	BAC05
AF	experienced staff		
B			
1	To minimize admission of lo	W BAWK02, BAWK05, BAWK06	BAC01, BAC02,
R1	rank CET students		BAC03, BAC04
E			
B			

From the SWOC analysis carried out, the strategic objectives are evolved. Towards realization of the strategic objectives resource centric key activities and action plans, for overall development with emphasis on enhancing UG, PG education and demand driven R&D&I have been framed. The mapping of key activities (for effects on and utilization of), and action plans to strategic objectives are enlisted below:

#### Human Resource

Key Activity and Action Plans	Strategic Objectives
Upgradation of qualifications and	<b>BAEP01:</b> To produce high quality
enhancement of skills of faculty	graduates, postgraduates and doctorates
* Encourage and depute faculty to	in selected academic areas
acquire higher qualifications (Ph.D &	
M.Tech)	BAEG11:To retain and attract well-
* Identify and depute faculty for need	qualified faculty and experienced staff
based training programmes	
* Encourage faculty to enhance their	
communication skills	
* Provide recognition/ incentives to	
faculty/ staff for qualification and skill	
enhancement	
* Involve industry personnel for in house	
skill enhancement training	
Promote High Quality Research	<b>BAEP01:</b> To produce high quality
amongst Faculty	graduates, postgraduates and doctorates
* Encourage faculty to engage in high	in selected academic areas
quality research through performance	
linked incentives	BAEP02: To proactively participate in
* Support faculty for publishing the	Government initiated research schemes
research outcomes in international	for socio-economic development
refereed journals/conferences	
* Attract in-house faculty as well as	BAEP03:10 Strengthen/Enhance
faculty from other colleges for part-	Mous with foreign Universities/
time Ph.D. under BEC R&D centers	industries and consolidation of alumni
* Attract faculty for Post-Doctoral	network
renowship (PDF) for enhancing quality	
	Key Activity and Action Plans   Upgradation of qualifications and enhancement of skills of faculty   * Encourage and depute faculty to acquire higher qualifications (Ph.D & M.Tech)   * Identify and depute faculty for need based training programmes   * Encourage faculty to enhance their communication skills   * Provide recognition/ incentives to faculty/ staff for qualification and skill enhancement   * Involve industry personnel for in house skill enhancement   * Encourage faculty to engage in high quality research through performance linked incentives   * Support faculty for publishing the research outcomes in international refereed journals/conferences   * Attract in-house faculty as well as faculty from other colleges for parttime Ph.D. under BEC R&D centers   * Attract faculty for Post-Doctoral Fellowship (PDF) for enhancing quality

	* Substantial action plans for	<b>BAEP06:</b> To foster innovative thinking
	Quantitatively increasing and	in the faculty and students
	qualitatively improving research by the	
	faculty individually iointly and	
	collaboratively	
	* Identify thrust areas of research in each	
	department	
	* Conduct orientation program on	
	research methodologies for young	
	faculty	
	* Share research experiences on a	
	common platform	
	* Launch working paper series to	
	encourage research work in BEC	
	* Propose joint research projects with	
	industries and institutions of higher	
	learning	
	* Depute faculty for carrying out research	
	at National/International R&D labs and	
	institutions of higher learning	
	* Involve industry experts in identifying	
	and supervising research problems	
	* Establish sophisticated research facility	
	with advanced testing equipment	
	* Establish Research Consultancy Cell	
	(RCC) to:	
	* Interact with Government agencies at	
	all levels on regular basis	
	* Create awareness about research	
	schemes among the faculty	
	* Establish centralized research facility	
	* Promote commercialization of	
	innovative projects/products from	
	UG/PG students and faculty	
	* To motivate faculty to take up R&D	
	projects from industries	
	* Providing space for setting up of	
	laboratories to industries and introduce	
	integrated courses	
	* Explore emerging inter disciplinary	
	research areas	
	* Project the strength of the institute by	
	designing and communicating the RCC	
DAVAG	brochure	<b>DAEDOG</b> To foster improveding this 1 is
BAKAUS	Encourage faculty to secure intellectual	<b>BAEPUO:</b> 10 loster innovative thinking
	* Provide institutional support	in the faculty and students
	* To organize workshops/seminars	
	* Promote natentable research	
Research	Scholars	
BAKA04	Attract more recearch scholars	<b>BAEP01:</b> To produce high quality
JUNIXAV4	* Attract competent research scholars	graduates, postgraduates and
	through research fellowships and	doctorates in selected academic areas
	independent research facilities	as ended in service deddenne dreds
	F	<b>BAEP06:</b> To foster innovative thinking
		in the faculty and students

	* Develop among undergraduate students	
	and/or research.	
	* Conduct awareness programs about	
	higher education and research	
	* Research oriented innovative projects	
	to be introduced at UG/PG level	
	* Arrange visits for UG/PG students to	
	advanced research laboratories and	
	institutions	
	* Invite renowned S & T professionals to	
	inspire students	
	* Create database of UG/PG and research	
	projects	
	* Organize project contests for UG/PG	
	students	
	* Establish knowledge sharing networks	
	labe	
BAKA05	Encourage High Quality Research	<b>BAEP01</b> . To produce high quality
Diminos	amongst Research Scholars	graduates, postgraduates and
	* Encourage the publication of technical	doctorates in selected academic areas
	reviews and papers in peer reviewed	
	journals and participation in national/	<b>BAEP06:</b> To foster innovative thinking
	international conferences	in the faculty and students
	$\star$ Attract regular Ph.D. students through	
	fellowships	
	* Take up need based projects from	
	industry and community	
	* Form inter & intra department research	
	* Conduct orientation program on	
	research methodologies for students	
	* Launch working paper series of BEC	
PG Stude	nts	
BAKA06	Enhance PG intake	<b>BAEP05:</b> To enhance intake in all
	* Motivate UG students to take up	branches of engineering to strengthen
	higher studies through awareness	and to establish new PG courses
	programs	
	* Attract meritorious students for PG	
	programs through teaching	
	assistantships and enhanced facilities,	
	such as centralized computational	
	online journals, hostel etc.	
	* Increase PG intake from 18 to 25 in	
	select PG courses (Machine Design	
	Computer Science and Engineering.	
	Structural Engineering, Digital	
	Electronics, Power & Energy Systems)	
BAKA07	Establish new PG programmes in	BAEP05:To enhance intake in all
	emerging technology areas	branches of engineering to strengthen
	* Establish new PG course in	and to establish new PG courses
	Biotechnology	

BAKA08	Promote student led entrepreneurship	BAEP07:To inculcate spirit of
	* Provide incubation facility to student	entrepreneurship culture in students
	entrepreneurs	and to provide incubation facility
	$\star$ Nourish reciprocal relationship with	
	leading industrialists	
	* Identify and establish linkages with	
	alumni entrepreneurs and post alumni	
	contact group on web	
	* Organize focused training through	
	Center for Entrepreneurship	
	Development (CED) to build the	
	entrepreneurial spirit and nurture it for	
	socio economic development.	
	* Facilitate academic projects towards	
	product development	
Staff		
BAKA09	Skill enhancement of technical and	BAEG11: To retain and attract well-
	other staff	qualified faculty and experienced staff
	* Identify and depute staff for need	
	based training programmes	
	* Offer incentives and better pay	
	packages to technical staff	
	★ Empower senior technical staff	

## **Technological and Infrastructural Resources**

Code	Key Activity and Action Plans	Strategic Objectives
Classrooms		
BAKA10	Upgrade classroom infrastructure through	<b>BAER10:</b> To upgrade educational
	adoption of state of the art educational	l infrastructure using the state of the art
	technologies	Information and Communication
		Technology (ICT) tools
Laborator	ries	
BAKA11	Strengthening and Establishing	<b>BAEP01:</b> To produce high quality
	Laboratories	graduates, postgraduates and doctorates
	* Establish new laboratories and	in selected academic areas
	strengthen existing laboratories for	
	cutting edge technology research	<b>BAEP02:</b> To proactively participate in
	* Involve industry personnel in setting	Government initiated research schemes
	up laboratories	for socio-economic development
		<b>BAEP04:</b> To design and offer skill
		oriented certificate and value addition
		programmes with emphasis on Soft
		skills and Professional skills to students
		for better employability
		DAEDOS Translava intela intel
		BAEPUS: 10 enhance intake in all
		branches of engineering to strengthen
T :h		and to establish new PG courses
	Libuour distinction	<b>PAED10.</b> To ungrada advicational
DAKAIZ	Strengthan digital content creation and	bALKIU: 10 upgrade educational
	* Strengthen digital content creation and	state of the ort Information and
	Hanagement facility	State of the art information and
	Finable somentic web and web 2.0	Communication Technology (ICT) tools
	Finance subscription to electronic	
	resources and databases	
Computin		
Computin	g racinues	

BAKA13	Establish Central Computing Facility	BAEP05: To enhance intake in all
	* Establish centralized advanced	branches of engineering to strengthen
	computing facility with round the	and to establish new PG courses
	clock access	
	* Create a centralized software	<b>BAER10:</b> To upgrade educational
	repository	infrastructure and Library using the
		state of the art Information and
		Communication Technology (ICT) tools
Multimed	ia Conference Hall	1
BAKA14	Multimedia Conference Hall	<b>BAEP01:</b> To produce high quality
	* Establish satellite enabled multipoint	graduates, postgraduates and doctorates
	interactive facility	in selected academic areas
	* Setup Audio and Video conferencing	
	facility	<b>BAEP02:</b> To proactively participate in
		Government initiated research schemes
		for socio-economic development
		BAEP03:To Strengthen/Enhance
		MOUs and consolidation of alumni
		network
		BALKIU:10 upgrade educational
		infrastructure and Library using the
		state of the art information and
		Communication Technology (ICT) tools

Communi	Communication Facilities			
BAKA15	Communication Facilities	<b>BAEP02:</b> To proactively participate in		
	* Strengthen internal communication	Government initiated research schemes		
	system.	for socio-economic development		
	* Establish local FM station for serving			
	community through technological	BAEP04:To design and offer skill		
	services	oriented certificate and value addition		
		programmes with emphasis on Soft		
		skills and Professional skills to students		
		for better employability.		

## Organizational Resources

Management capacity building				
BAKA16	Management capacity building	<b>BAER09:</b> To formulate well structured		
	* Depute Principal and senior faculty/	auditing procedures (academic, Finance		
	staff for participation in Management/	and administrative)		
	Administrative skill development			
	training programmes	<b>BAEG11:</b> To retain and attract well-		
		qualified faculty and experienced staff		
Institutional reforms				

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## **Relational Resources**

Industry-institute collaboration				
BAKA20	Enhance industry-institute	BAEP02:To proactively participate in		
	collaboration	Government initiated research schemes		
	* Enter into MoUs for excellence in	for socio-economic development		
	education, training, research,	L		
	consultancy and community	<b>BAEP03</b> :To Strengthen/Enhance MOUs		
	development under the aegis of RCC	and consolidation of alumni network		
	(BAKA02)			
	* Match the core research areas with	<b>BAEP07</b> . To inculcate entrepreneurship		
	Industries in the region	culture in students and to provide		
	* Specialized subject teaching by	incubation facility		
	industry experts	incubation facility.		
	<b>*</b> Eaculty deputations to industry for	<b>BAEP08</b> . To establish Industrial		
	research/ training	Consultancy Services Coll (ICSC)		
	The search training	Consultancy Services Cell (ICSC)		
	↑ Information of visiting faculty and			
	universities to be posted on BEC			
	web-site			
	* To organize executive meets			
	regularly and nourish good			
	relationship with industrialists			
	* To involve industry, institute and			
	alumni personnel in academic bodies			
	* To motivate faculty to take up			
	industry sponsored R&D projects			
	* Reconstitute and rejuvenate the			
	Industrial Consultancy Services Cell			
	(ICSC) and formulate the guidelines			
	to channelise all consultancy services			
	through the cell			
BAKA21	Linkages with Higher Learning	<b>BAEP06:</b> To foster innovative thinking in		
	institutes	the faculty and students.		
	* Action plans for establishing MoUs			
	with Institutions of Higher Learning	<b>BAER09:</b> To facilitate the faculty and		
	in India and Foreign Universities	staff to upgrade qualification and acquire		
	* Identify and Establish links in	new technical skills		
	specialized areas in each discipline.			
	* Define modalities for establishing the	<b>BAER10:</b> To explore research in inter-		
	collaboration.	disciplinary areas		
	* Student exchange programs for			
	project/ research for one semester			
	* Faculty exchange programs for			
	research/ teaching assignment			
	* Information of visiting faculty and			
	universities to be posted on BEC			
	web-site			
	* Establish a forum of researchers			
	belonging to various institutes			
Profession	nal Networking			
BAKA22	Enhance Professional Networking	BAEP03:To Strengthen/Enhance MoUs		
	* Enhance institutional membership to	and consolidation of alumni network		
	professional bodies			
	* Encourage faculty to join	<b>BAEP04:</b> To design and offer skill		
	professional bodies and actively	oriented certificate and value addition		
	involve in activities	programmes with emphasis on Soft skills		
	* Host activities of professional bodies	and Professional skills to students for		
	in BEC campus	better employability.		
	L.			
		BAEP08:To establish Industrial		
		Consultancy Services Cell (ICSC)		

Alumni B	onding	
BAKA23	Alumni Bonding	BAEP03:To Strengthen/Enhance MOUs
	* Organize alumni meets	and consolidation of alumni network
	* Invite distinguished alumni to	
	address and interact with students	
	★ Institute distinguished alumnus awards	
	* Form student mentorship council of alumni	
	* Identify alumni who are	
	entrepreneurs and invite them to	
	inspire student led entrepreneurship	
Media and	d Publicity	
BAKA24	Establish good rapport with Media	<b>BAEP05:</b> To enhance intake in all
	for Publicity and Brand-building	branches of engineering to strengthen and
	* Establish BEC communications	to establish new PG courses
	office for effective brand building	
	* Promote college Brand Image	<b>BAES12:</b> To minimize admission of low
	through participation in educational	rank CET students
	fairs, Informative brochures and pamphlets	
	$\star$ Publicity and advertisements in all	
	major cities and also through BEC	
	alumni	

#### **Financial Resources**

BAKA25	Finance Mobilization	BAER09:	То	formulate	well-structured
	* Form a task force for identifying	auditing pr	oced	lures	
	finance mobilization opportunities				
	from various sources				
	* Consolidation of corpus, faculty				
	development, depreciation and				
	maintenance funds.				
	* Other IRG activities such as				
	consultancy, training activities will				
	also be used for sustaining the				
	activities				
	* Prepare detailed proposals for				
	gaining financial assistance from				
	specific sources (Eg: From AICTE,				
	DRDO, Alumni, International				
	Endowment Foundations)				
BAKA26	Cost optimization	BAER09:	То	formulate	well-structured
	* Conduct cost audits for minimizing	auditing pr	oced	lures	
	wasteful expenses				
	* Conduct regular internal and third				
	party financial audits				
	* Devise financial procedures in tune				
	with modern accounting trends				

## **Challenges for Implementation of Strategic Plan:**

- \* The College foresees the following challenges in implementation of strategic plan, Fig. A.
- \* Changing the mind-set of faculty to pursue higher studies and support staff to enhance skills
- \* Developing faculty expertise in specific domain and interdisciplinary areas to start new PG programmes and offer new electives
- \* Creation of interest about higher studies among UG students

- \* Inculcating awareness about benefits of research amongst UG/PG students
- \* Orienting UG/PG projects towards Product development
- \* Tuning the PG courses to be on par with industrial needs
- \* Ascertaining higher pay packages and perks to post graduates
- \* Initiation of collaborative research between industry and institutes due to far-flung location
- \* Overcoming the dithering of experts due to the remoteness of the institute
- \* Rapid changes in the socio-economic scenario
- \* Exposure to forecasting, qualitative analysis and quantitative analysis required for implementation of strategic planning

The college with its resource centric approach to development is confident of overcoming these challenges through dedicated work of its committed and experienced faculty.

Codes used in Strategie 1 ian					
1	2	3	4	5	6
Cells 1 &2 rep	oresent college	Cells 3 & 4 represent		Cells 5 & 6 represent	
or departmen	ts	strength/ weakness/		sequential ser	ial number in
		opportunities/ Challenges		each category	
		or key activitie	es		

Cells 1 & 2	Meaning
BA	Basaveshwar Engineering College
ВТ	Biotechnology Department
CS	Computer Science & Engineering Department
CE	Civil Engineering Department
EC	Electronics & Communication Engineering Department
EE	Electrical & Electronics Engineering Department
IP	Industrial & Production Engineering Department
IS	Information & Science Engineering Department
ME	Mechanical Engineering Department
EIE	Electronics & Instrumentation Engineering Department
AU	Automobile Engineering Department
MCA	Master of Computer Applications Department
MBA	Master of Business Applications Department

Cells 3 & 4	Meaning
EG	Engage – ST strategies
EP	Exploit – SO strategies
ER	Explore – WO strategies
ES	Escape – WT strategies
КА	Key Activities
OP	Opportunities
SC/WC	Strengths/Weaknesses Character (Human Resources)
SF/WF	Strengths/Weaknesses Financial Resources
SK/WK	Strengths/Weaknesses Knowledge (Human Resources)
so/wo	Strengths/Weaknesses Organizational Resources
SR/WR	Strengths/Weaknesses Relational Resources
SS/WS	Strengths/Weaknesses Skill (Human Resources)
ST/WT	Strengths/Weaknesses Technological and Infrastructural Resources
С	Challenges

**Codes used in Strategic Plan** 

## Strategic Management Process of Basaveshwar Engineering College - 10 Year Road Map

## **STRENGTHS**

professional experience BASK02: Expertise in multidisciplinary knowledge areas

placement offers from reputed companies

for advanced learning and research

BASK05: Competent technical staff

Human Resources

Knowledge

#### WEAKNESSES

#### Human Resources

Knowledge BAWK01: Some faculty needs qualification upgradation BAWK02: Lack of continued exposure to latest technologies BAWK03: Weak in inter-institute, inter-department research ctivities and collaborative research with industry/ R&D Labs BAWK04: Need for knowledge upgradation in some specialized areas - evolved from individual department SWOC analysis BAWK05: Low rank student input BAWK06: Inbreeding of faculty

BAWS07: Need for skill upgradation of faculty/ technical staff as

Technological and Infrastructural Resources

VO11: Documentation of policies, systems, and operational

BAWO12: Few faculty over burdened with administrative and

BAWO13: Frequency and intensity of academic and administrative

BAWO14: Benchmarking required with other academic

BAWO15: Necessity for write-off procedures for obsolete

AWO16: Required to increase involvement of HoDs and senior

BAWO18: Complete and accurate records of fixed assets to be

BAWR19: Need for increasing the institutional memberships to

BAWF20: Delay in release of salary grants by government for

BAWF21: Delay in release of government contribution towards

BAWT10: Need for giving architectural outlook to buildings

evolved in individual department SWOC analysis

BAWS08: Less exposure to IPR competencies

**Organizational Resources** 

procedures need to be strengthened

audits at departmental level to be increased

faculty in institute level planning and budgeting

VO17: Need for decentralization and financial auto

#### Skill

non-academic activities

Relational Resources

Financial Resources

professional bodies

aided departments

fees for SC/ST students

BASS06: Faculty use new educational technology hardware/devices and employ innovative teaching-learning methodologies BASS07: Core competencies in organization of international, national conferences/ seminars/ workshops and continuing education ogrammes for working professionals

BASK01: Qualified and experienced faculty with high average

BASK03: High quality of student output has led to increased career

BASK04: Some high performing students have demonstrated potential

BASS08: Expertise in preparation of Project Proposals BASS09: Faculty use IT (information technology) software tools for teaching learning and research

BASS10: Guiding UG. PG and research projects, which are innovative and need based

BASS11: Expertise in technical writing and publications BASS12: Expertise in documentation, counseling, consultancy and orofessional services

#### **Character and Culture**

BASC13: Synergistic team of young and experienced faculty who are

committed BASC14: Affection and Concern towards students

BASC15: Care and diligence in maintenance and review of academic records at faculty level

BASC16: Intellectual enthusiasm among faculty and students BASC17: Eagerness to deliver more than the stipulated requirements BASC18: Mutual trust and positive attitude of faculty and staff

#### Technological and Infrastructural Resources

BAST19: Research facilities with sophisticated instruments enhanced through extramural research funds

BAST20: Departments are equipped with state-of-art laboratories

BAST21: Adequate working space

BAST22: On campus amenities for comfortable stay

BAST23: Wi-Fi campus BAST24: Excellent distributed computing facilities with 8 servers and nore than 1000 PCs and laptops

BAST25: Good library facility

#### **Organizational Resources**

Well-designed orgar

- BASO27: Active and clearly defined bodies for institutional functioning BASO28: Periodic review and revision of curriculum in tune with
- BASO29: Clearly specified calendar of events
- BASO30: Empathetic and supportive management BASO31: Policies for Faculty and Staff development
- BASO32: Policies for student development

BASO33: Remedial classes for academically weak students: Counseling,

entoring of all students BASO34: Student forums for extra and co-curricular activities ASO35: Existence of well established BEC-STEP

#### **Relational Resources**

BASR36: Student professional bodies BASR37: Cordial and mutual relationship with academic institutes

BASR38: Professional networking

- BASR39: Institute Interactions for collaborative research activities
- BASR40: Industry Interactions through MoUs BASR41: Regular alumni Interactions

Financial Resources

BASF42: Corpus, Maintenance, Faculty Development and Depreciation funds established BASF43: Management provides funds for college activities

BASF44: Revenue through Consultancy BASF45: Funding from Union and State Government agencies BASF46: Financial support from alumni

#### **OPPORTUNITIES**

BAOP01: Paradigm shift in education system from imparting knowledge to enhancing learning BAOP02: Emphasis by Government on research in technological areas for socio-economic development BAOP03: Increasing demand for PG courses in specialized areas BAOP04: Only Engineering College in the district enjoying high degree of ownership in the community BAOP05: Information Technology revolution and massive demand for engineering professionals BAOP06: Emergence of interdisciplinary research areas BAOP07: Increasing opportunities to present research outcomes on various platforms BAOP08: Exciting opportunities for collaboration with global institutes of higher learning and R & D organizations BAOP09: Opportunity for developing smart campus BAOP10: Opportunity for Industry Institution Interaction BAOP11: Scope for consultancy BAOP12: Opportunity to attract students from different countries and BAOP13: Requirement for value added training programmes for mployed rural youth of the region BAOP14: Growth in service sector BAOP15: Enhancement of engineering seat intake in multiples of 60 as ounced by AICTE

# SWOC **ANALYSIS**

#### CHALLENGES

BAC01: Mushrooming of engineering colleges in specific locations and possible entry of foreign institutions BAC02: Higher fees for technical education leading students to look for other avenues BAC03: Students with low rank input BAC04: Many colleges/universities offer fee

concession and other incentives to attract good CET rank students

BAC05: Frequent changes in education policy

To be recognized as a premier technical institute committed to developing exemplary professionals, offering research based innovative solutions and inspiring inventions for holistic socio-economic development.

Vision

#### Mission

- To pursue excellence through student centric dynamic teaching-learning processes, encouraging freedom of inquiry and openness to change
- To carry out innovative cutting edge research and transfer technology for industrial and societal needs
- To imbibe moral and ethical values and develop compassionate, humane professionals

#### Values

Work is Worship: The core essence of every activity of the college is inspired by the life and saying of Lord Basaveshwara the visionary of 12<sup>th</sup> century. The "Basaveshwar Engineering College" is named after the sionary

Student Centric: Academic and Administrative processes are devised and practiced to be student centric

Innovation: Encourage innovation and research for betterment of society

Learning Centric: To inculcate life long learning through teaching-learning and research activities Empathetical Campus Culture: Cordial and harmonious

living on campus through empathy

Indian Ethos: Nurture modern outlook imbibed with

ndian ethos in BEC community

#### **Quality Policy**

eaching-learning, research, admi istrative processes are quality driven and embellished with continuous nprovements (Kaizen) to meet the global standards by rigorous adherence to set procedures and exhaustive quality audits

BAEP04: To design and offer skill oriented certificate and value addition programmes with emphasis on Soft skills and Professional skills to students for better employability BAEP05: To enhance intake in all branches of engineering to strengthen and to establish new, distinctive PG courses BAEP06: To foster innovative thinking in the faculty and students

STRATEGIC OBJECTIVES

academic areas

development

and consolidation of alumni network

BAEP07: To inculcate spirit of entrepreneurship among students and to provide incubation facility

BAEP08: To strengthen Industrial Consultancy Services Cell (ICSC)

BAER09: To facilitate the faculty and staff to upgrade qualification and acquire new technical skills

BAER10: To explore research in inter disciplinary areas

BAER11: To create awareness of Intellectual Property Rights (IPR) and encourage patenting through cutting edge research

BAER12: To establish highly efficient internal communication and information system

BAER13: To formulate well structured auditing procedures (academic, finance and administrative)

BAER14: To upgrade educational infrastructure using the state of the art Information and Communication Technology (ICT) tools.

BAEG15: To retain and attract well-qualified faculty and experienced staff.

BAES16: To minimize admission of low rank CET students

