

Shri Shivaji Education Society Amravati's

Shri Shivaji Science College

Shivaji Nagar, Morshi Road, Amravati - 444 603 M.S.

Accredited by NAAC with 'A' grade with a CGPA of 3.13 and UGC Awarded College with Potential for Excellence Identified by DST for FIST and SGB Amravati University as Lead College

PERSPECTIVE PLAN 2007-2022

The goals to be achieved during 2007–2022 are formulated for the development with respect to following aspects.

- 1. Courses/Programmes
- 2. Teaching Learning Process through ICT
- 3. Research & Development
- 4. Human Resource and Management
- 5. Support services and facilities for Students
- 6. Infrastructure Development & Management
- 7. Extension Activities and Institutional Social Responsibility
- 8. Career Guidance and Placements
- 9. Best and Innovative Practices
- 10. Management Information System
- 11. Alumni Relations

1. COURSES/ PROGRAMMES TO BE INTRODUCED

- PG Courses
- Research
- Vocational courses
- Short Term Courses
- Bridge Courses
- Career Oriented Courses
- Introduction of GIC at PG level

Also, in view of enriching/supporting the present curriculum and value based education following small courses/activities will be introduced.

- Enrichment of curriculum as per need at department level.
- Yoga education
- Disaster management
- Women grooming center
- Value Education
- Feedback on curriculum.

2. ENHANCEMENT OF TEACHING, LEARNING & EVALUATION (TLE) PROCESS

To cater to the needs of advanced and slow learners along with conventional chalk-and-talk teaching some measures for improvement will be taken.

- Use of ICT in teaching & Learning will be encouraged.
- Use of various other TLE methods
- Establishment of ICT class rooms.
- Self-learning through seminars, field/industry visits will be encouraged.
- To introduce bridge courses & short term certificate courses.
- Introduction of e-learning and development of e-content
- To cater to the needs of slow learners remedial coaching will be continued.
- To create and maintain the learning ambience, more learner centric activities such as guest lectures, workshops and competitions for the students will be organized.
- The constant formative and summative evaluation will be continued.

3. RESEARCH & DEVELOPMENT

To achieve goals of quantitative and qualitative increase of research output the college he following initiatives will be taken:

- Improving human resource through organization of workshops/conferences.
- Publication in top journals and presentation in national/international conferences will be encouraged.
- Faculty will be encouraged to undertake major and minor research projects from UGC and other funding agencies.
- To get recognition of research laboratory from agencies like DST/DBT/Industries
- Improving existing laboratories and creating new infrastructure and facilities for quality research.
- Existing Central Instrumentation facility will be enhanced.
- Collaborative research will be encouraged.
- Faculty/departments will be encouraged to undertake consultancy services.
- Faculty will be encouraged to develop e-resource for research scholars.

4. HUMAN RESOURCE MANAGEMENT

The human resource strategy of this plan is aimed at increasing the strength of the human resources that includes faculty & staff

a) Faculty

- The promotion of faculty members through Career Advancement Scheme (CAS) is in place as per the UGC norms.
- For effective implementation of new courses faculty will be deputed for training and short term courses.
- Training programmes and workshops for teachers will also be organized.
- Faculty will be honoured for their quality research.
- To groom leadership among the faculty, opportunity will be given to shoulder various responsibilities in administrative process of the college.
- The college will look after the welfare of the faculty.

b) Non-teaching Staff

For the quality processes that are expected to maintain in enhancing standard of the institution a trained staff is essential.

In this regard following activities will be undertaken –

- Organizing trainings for administrative and technical staff.
- THE COLLEGE WILL LOOK AFTER TIME BOUND PROMOTIONS AND WELFARE OF THE STAFF MEMBERS.

5. SUPPORT SERVICES AND FACILITIES FOR STUDENTS

Following support services and facilities will be made available/enhanced for students.

- Career counseling cell
- Placement cell
- NET/SET coaching
- Language laboratory to improve the communication skills
- Guardian Teacher Scheme
- Grievance Redressal Cell, Anti Ragging Cell
- Looking towards increasing enrollment of the girls special efforts will be taken to groom leadership amongst them.
- Games and sports indoor and outdoor facilities will be increased.

6. INFRASTRUCTURE

Additional infrastructural facilities will be created to cater to the needs generated by the proposed development plans.

Among them the facilities to be created in the near future are-

- New library building.
- Renovation of AV theatre/s
- Wi-Fi in campus
- Advanced IT infrastructure
- Enhancement of NRC.
- Separate class rooms for PG students.
- Construction of new classrooms.
- Development of digital class rooms.
- Non-residential students center.
- Grooming Theatre.
- Students Study Centres -
 - ✓ Wildlife and Bird conservation study centre.
 - ✓ Limnological and fish study centre.
 - ✓ Plant diseases diagnosis study centre.
 - ✓ Remote sensing study centre.
 - ✓ Astronomy and Astro -Physics study center.
 - ✓ Environment Monitoring centre.
 - ✓ Communication Skills study centre.
 - ✓ Open Source Software study centre.
 - ✓ Data analysis study centre.
 - ✓ Spiritual and Value Education study centre.
 - ✓ Dr Panjabrao Deshmukh's vision study centre.

7. EXTENSION ACTIVITIES AND INSTITUTIONAL SOCIAL RESPONSIBILITY

Along with its academic pursuits the institution shoulders the social responsibilities from time to time.

- Extension activities in collaboration with educational institution of national repute, GOs and NGOs will also be organized.
- Efforts will be taken for carbon neutrality in the campus.
- During the conference and workshops some of the indirect beneficiaries like farmers, small scale industrialists and officials from GOs and NGOs will be invited for an interaction with the field experts.
- Conducting Green Audit with respect to use of renewable energy, water harvesting and Carbon Neutrality, hazardous waste management, e-waste management and biodiversity.
- Science Awareness programme.
- Organization of Students Academic extension activities.
- Institutional Social responsibility
- Environmental Awareness Camp & Conservation.
- Establishment of Student Grooming Centers.
- Installation of solar power system and water harvesting.

8. BEST AND INNOVATIVE PRACTICES

Following best practices will be strengthen.

- Rain water harvesting
- Energy conservation measures
- Use of renewable energy sources.
- Waste disposal management, e-waste management and recycling of materials.
- Noise and Air Pollution Monitoring
- Academic and administrative audit.
- Feedback mechanism

Apart from these best practices college has decided to implement some innovative ideas which will help the institution to improve its quality.

- Introduction of Management Information System.
- E- Attendance of students.
- Innovations in laboratory teaching will also be encouraged.

9. ALUMNI RELATIONS

- Provision of online registration for alumni.
- More opportunities will be created for alumni to organize various programmes on campus and engage with students and faculty.
- Alumni will be encouraged to support activities of the college.

OUTCOMES AND ACHIEVEMENTS (2007 – 2017)

GRANTS RECEIVED AND MAJOR DEVELOPMENT FOR LAST TEN YEARS

Major Funding Received from following Agencies:-

- UGC: 1. Development Grants 2. BSR Grants 3. CPE Phase I & II Grants 4. Special grants (conference/travel/research projects).
- DST: 1. FIST 2. Special grants (conference/travel/research projects).
- DBT : Special grants (conference).
- RGSTC: SIAC
- MoEF: Special grants (conference / research projects).
- Indian Science Congress, SGBA University, GSDA

Accomplishment
Academic Developments
PG: Bioinformatics & Environmental Science
UG: BCA
Research:
CIC, Recognition of Research Laboratories
COC : Wild Life & Eco Tourism & Astrophysics & Astronomy
Laboratory Upgrading
Infrastructure Developments
Class Rooms (10)
Auditorium (1)
Laboratory Renovation: Env. Science, Microbiology, Biotechnology, Computer Science and Geology
Establishment of CIC :
Basket ball Ground

Women Hostel
Office Renovation
Gym
Campus flooring
Human Resource Development
Conferences organized: 15
Workshops for Teachers organized: 19
Workshops for Students organized : 10
Workshops for Non-teaching staff organized : 5
Workshops for Principals : 4
Competitions / Exhibitions / Quiz / Excursion / Lectures : 135
Extension/ ISR Activities, Others
Science Exhibitions
Avishkar
"Vigyan Parishad"
Field Visits
Sports Events

DEVELOPMENT GRANT RECEIVED FROM UGC DURING THE ELEVENTH AND TWELFTH PLAN:

Heads	11 Plan	12 Plan
Building	Rs. 23,50,000/-	Rs. 13,60,000/-
Equipment	Rs. 49,50,000/-	Rs. 42,13,500/-
Girls Hostel	Rs. 100,00,000/-	

Heads	Name of Agency / Scheme	Year	Amount sanctioned
Building, Virtual Classroom, Equipment, Books and digital library,	BSR grant (UGC)	2012-2015	Rs. 1.70 Crore
Supplies and Materials, Computing & Networking NRC and other Facilities	CPE grant Phase – I (UGC)	2010-2015	Rs. 1.00 Crore
	CPE grant Phase – II (UGC)	2017 – 2022	Rs. 1.5 Crores
	FIST	2017 – 2022	80 Lacks

INFRASTRUCTURAL DEVELOPMENTS

Lecture Theatre Building
Capacity: 10 Lecture Theatres with 120 students capacity each



Inauguration of Lecture Theatre Building By Hon'ble Dr. Raghunath Mashelkar and Dr. Vijay Bhatkar



Dual Entry Points: Main Gate -II



S.N.	Departments
1	Biotech. and Microbiology
2	Environmental Science
3	CIC
4	Computer Science
5	Geology
6	Physics
7	Statistics
8	Office

Renovated Main Building in year 2015



YEAR	University Color Holders State / National
2008-09	01
2009-10	04
2010-11	02
2011-12	03
2012-13	03
2013-14	10
2014-15	12
2015-16	13
2016-17	15

Gym developed with the UGC and college funds of Approx. 10Lacks achievements tabulated



International standard Basket Ball Ground with Flood Lights arrangement (Approx. Cost 32 Lacks contributed by UGC and College)
(Winner Team for 2016-17)

डॉ.पंजाबराव देशमुख स्मृती सायन्स अँड इनोवेटीव ॲक्टीव्हीटी सेंटरसाठी मंजुरी

श्री शिवाजी शिक्षण संस्था, अमरावतीच्या शिरपेचात मानाचा तुरा विदर्भातील एकमेव विज्ञान केन्द्र

अमरावती/प्रतिनिधी - श्री शिवाजी क्षण संस्थेचे अध्यक्ष ॲड.अरुणभाऊ शेळके अमराबती/प्रतिनिषी - श्री शिवाजी शिक्षण संस्थेचे अध्यक्ष अंड. अरुणभारक शेळके यांच्या अथक प्रयत्नाने डॉ. पंजाबराव देशमुख स्मृती सायन्स अंड इनोवेटीव ॲक्टिव्हीटी सेंटरच्या निर्मितीसाठी मंजुरात मिळाली आहे. लवकरच श्री शिवाजी विज्ञान महाविद्यालया लवकरच श्री ष्राधाजा विज्ञान महावद्यालया रानावच्या अर्चेच एक जामेवा या केंद्राची निर्मिती होणार असून सदर खर्चासाठी २.५ कोटीचे अनुदान मृज् झाले आहे. विद्यमंत अशा प्रकारचे पहिलेच विज्ञान मार्ग्ट्झंन केंद्राची स्वापन असायवतीत होत असल्याने श्री हिवाजी हिक्षण संस्थेच्या शिरायेचात आणाडी एक

ाशवण संस्थान्य । अर्पयात आणवा एक ग्रेमानाच तुरा तालाना आहे. अमरावती येथील श्री शिवाजी विज्ञान महाविधात्त्रालयात्राच्या अर्दीच एकर जागेबर २.५ कोटी रुपये अनुदानासह सदर केंद्र निर्मितीच्या प्रस्तावास मान्यता मिळाली अस्त त्वकर्षन ह्या केंद्राचे निर्माण सुन्हते जाहे. विदर्भातील च अमरावती विभागातील सर्व स्थान व ग्राम्बरचारी विकाशकारी वेचानिक विद्मातिल व अमरावती विमागतिल सव समाज व प्रामुख्याने विद्यार्थ्यांमध्ये वैज्ञानिक दृष्टीकोण विकसित करणे, विज्ञानासंबंधी जाणीव आणि जिज्ञासा निर्माण करणे, वैज्ञानिक कल्पनाशक्तीला वाव देणे व नाविण्यपूर्ण कल्पनांना मुर्त रूप देण्यास सहाय्यता करणे



अभिनव पद्धतीचे बांधकाम, दर्जेदार आभनव पद्भागा वा धका म, दुबदार प्रयोगायाळा, श्रेवारुष, संगणक कक्ष, श्रेवारुष, विज्ञान प्रयोगाय्या प्रतिकृती व संग्रहालय अशा सर्व सार्थीनी सुसज्ज अस्पतले हे केंद्र या भागातील एक अध्यावत विज्ञान गर्भादिक केंद्र असणार असून ते सर्व विद्यार्थिना, श्रिक्कांना व विज्ञान भोगीना प्रंगणादावी ठरेल अशा अपेक्षा आहे. राजीव गांधी विज्ञान व तंत्रज्ञान आयोग, महाराष्ट्र शासन, मुंबई यांनी नुकतीच या प्रकल्पास आर्थिक सहाय्यता व मान्यता प्रदान केली आहे. डॉ.होमी भाभा



करणार असून, राष्ट्रीय वस्तुसंग्रहालय परिषद, कोलकाता द्वारे या केंद्राच्या भीतिक सुविधांचे निर्माण होत आहे. यादृष्टीने या सर्व संस्थांशी श्री शिवाजी शिक्षण संस्थेचा सामंजस्य करार

श्री शिवाजी शिक्षण संस्था, अमगवतीचे अध्यक्ष उमारणीकरीता समन्वयाची जबाबदारी श्री अँड. अरुणभाऊ शेळके बांनी डॉ.पंजाबपाव शिवाजी विज्ञान महाविद्यालय, अमरावती देशमुख सायन्स अँड इमोबेटीव अक्टिलीटी यांचेकडे सोपविष्यात आली आहे. संपूर्ण सेटर स्थापनेक्षीत पुढ्कार पेतनाव व राष्ट्रीय विदर्शवासीयांकरीता मार्गट्रक व रोपालाई विज्ञान दिताचे निर्मानो सदर केंद्राची एक भेट ठरणाऱ्या या प्रकल्पाचे नियोजन व निर्मिती आहे. डॉ.होमी भागा नुकताच मुंबई येबे करण्यात आला. शिकणमहर्षी विज्ञान दिनाचे निमित्ताने सदर फेंट्राची एक भेट दरणाऱ्या या प्रकरणाचे नियोजन व निर्मित्ते विज्ञान केट, मुंबई हे डॉ.प्वाबराव उपाद्य पाइसाहेब देशमुख याना संपूर्ण अमायतीकाना दिली आहे. या फेट्रास शिक्षण अपेक्षित असलेल्या बुदीमाणायादा व संपूर्ण विद्यामणे अग्राजता हे एकमे संस्थेची संपूर्ण कार्यकाणित सेस संस्था सिव्ह व तांत्रिक सहाय्य विज्ञानिष्ठ समात्र निर्मितीचे उदिष्ट समोर ठेबून केंद्र असणार आहे. या प्रकरणाचे यशस्यी यांनी महत्वपूर्ण भूमिका बजावून परिक्रम घेतले.

महाराष्ट्रात दोनच सेंटरला मान्यता

महाराष्ट्र शासनाच्या राजीव गांधी विज्ञान व तंत्रज्ञान आयोगाच्यावतीने महाराष्ट्रामध्ये केवळ दोनच शैक्षणिक संस्थांना सायन्स अँड इनोव्हेटीव संस्थान सायन्त अड इनाव्हटाय ऑक्टव्हीटी या सेंटरची मंजुरात देण्यात आली आहे. महाराष्ट्रामध्ये अग्रगण्य असलेली रयत शिक्षण संस्था व श्री शिवाजी शिक्षण संस्था यांचा यामध्ये समावेश आहे. हे सेंटर मिळविण्यासाठी मंत्रालयात नुकताच सामंजस्य करार करण्यात आला. श्री शिवाजी शिक्षण संस्थेच्यावतीने प्राचार्य डॉ.वि.गो. ठाकरे यांनी सदर कराराच्या वेळेस उपस्थिती लावली होती. या सामंजस्य कराराप्रसंगी राजीव गांधी विज्ञान व तंत्रज्ञान आयोगाचे अध्यक्ष डाॅ.अनिल काकोडकर, सचिव ए.व्ही.सप्रे यांची याप्रसंगी उपस्थिती होती.



Dr. Panjabrao Deshmukh Memorial Science Centre

Sanctioned by Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra, Total Funds - 2.5 Crores



UGC and College Funded Payoshini Girls Hostel (2009)

Inaugurated by Hon'ble President Pratibhatai Patil (Approx. Cost: Rs. 1,30,00,000/-)



Lecture Theatres Created with the help of UGC and College Fund (Approx. Cost:3.00 Crores)



Sir C.V. Raman Auditorium Inaugurated at the hands of Hon'ble Pandurangji Fundkar, Agriculture Minister, Maharashtra State (Approx. Cost:67.00 Lacks)



Administrative Office renovation, up-gradation and automation

LABORATORY RENOVATIONS





Department of Computer Science





Department of Chemistry



Department of Environment Science





Department of Geology





Department of Microbiology and Biotechnology



Microbiology and Biotechnology Research Laboratory





Central Instrumentation Cell





Physics Laboratory and Astronomy Telescope





Students Access Centre

Statistics Laboratory



Department of Zoology Lab

OTHER FACILITIES



Girls Common Room

Vehicle stand



Botanical Garden

Library

RESEARCH OUTCOME (2007 - 2017)

Details	Number	Publication details	Number
Recognized Research Labs	09	Papers in Journals	610
Supervisors	31	 Total no. of citations 	1517
Ph.D. Produced	67	Highest Impact Factor	3.898
Ph.D. On-going	68	Highest h-Index	14
Major Projects	09	Highest SNIP	1.38
Minor Projects	22	 Highest SJR 	1.23
Project Amount in Rs. Lakh	114.49	Books Edited	39
Events Organized		Chapters in Books	56
National	07	Papers in Proceedings	407
State / Regional	29	Presentations Abroad	06
Invited Lectures	92	Best Paper Award	12

STUDENTS' ACHIEVEMENTS

Sant Gadge Baba Amravati University Merits (2007 – 17)

S.N.	SUBJECT/CLASS	NO. OF STUDENTS
1	UG (B. Sc. + BCA)	29
2	PG (BOTANY)	05
3	PG (BIOINFORMATICS)	11
4	PG (CHEMISTRY)	02
5	PG (COMPUTER SCIENCE)	14
6	PG (ENVIRONMENTAL SCIENCE)	12
7	PG (PHYSICS)	03

PRIZE WINNERS IN ACADEMIC COMPETITIONS (SEMINAR/QUIZ/POSTER/ESSAY ETC.)				
International/National 15				
State 25				
University 206				
Avishkar 07				

COMPETITIVE EXAMINATIONS

Examination	No. of Students Qualified
NET	35
SET	37
GATE / CAT	14
MPSC/ UPSC	26
INSPIRE	45
DEFENCE SERVICES	04
Others (PAT, JNU, etc.)	97

NCC ACHIEVEMENTS AT STATE AND NATIONAL LEVEL

Achievements	Number of Students
Youth Exchange Programme of India	01 in Vietnam
	01 in Bhutan
RD Parade, Delhi	03
TSC, Delhi (Gold Medal)	01
TSC, Delhi (Silver Medal)	01
TSC, Delhi	06
Selected in IMA	01
Placement for Sub-major	01
Best Cadet SAHARA Scholarship	01
Best Firer	01

ACADEMIC EXCELLENCE AT JUNIOR COLLEGE LEVEL

YEAR	Board Merit List	CET	Subject Topper	Sports
2007-08	20	25	05	13
2008-09	27	18	06	14
2009-10	18	08	09	34
2010-11	26	10	03	47
2011-12	23	23	07	51
2012-13	12	19	06	45
2013-14	17	12	05	21
2014-15	23	14	06	22
2015-16	21	16	05	19
2016-17	21	17	06	18

AVISHKAR EXCELLENCE



EVENTS ORGANIZED (2007 - 2017)

2007 - 2008

























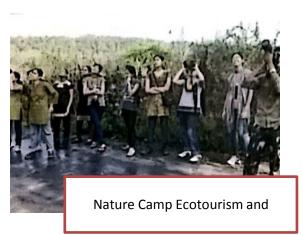








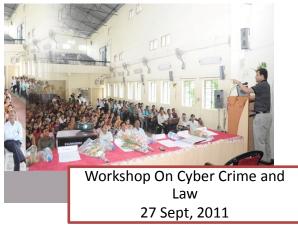






































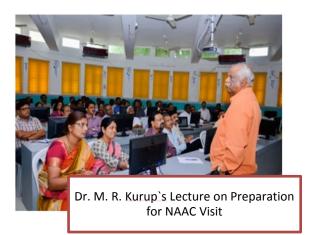










































VISIT OF DIGNITARIES



Dr. Jayant Naralikar

Dr. Raghunath Mashelkar



Dr. Anil Kakodkar

Dr. Vijay Bhatkar



Dr. Mangala Naralikar

Dr. Shivaprasad Khened

PROPOSED DEVELOPMENT PLAN AND EXPECTED EXPENDITURE (FOR 2017-22)

Major Funding Agencies

- UGC: 1. Development Grants 2. BSR Grants 3. CPE Phase I & II grants 4. Special grants (conference/travel/research projects).
- DST: 1. FIST 2. Special grants (conference/travel/research projects).
- DBT : Special grants (conference).
- RGSTC : SIAC
- MoEF: Special grants (conference / research projects).
- Indian Science Congress, SGBA University, GSDA

S.N.	Proposed Plan	Funding Source
1	Academic Developments	
	PG: Microbiology & Mathematics	College
	UG: BVOC	UGC and College
	PG Diploma in Data Analytics	UGC and College
	Career Oriented / Skill Development Courses	UGC
	Digitized Classrooms (05)	CPE and College
	Modernization of UG Laboratories	CPE and College
	Modernization of PG & Research Laboratories	FIST and College
	CIC up gradation	UGC and college
	Students Study Centre	College
	Language Laboratory	CPE and College
	Establishment of Digital Library	CPE and College
2	Infrastructure Developments	
	Class Rooms (12)	UGC and College
	Auditorium (1)	UGC and College
	Renovation of AV Theatre and Old Auditorium	College
	Laboratory Renovation: Botany, Bioinformatics.	College
	Physics, Chemistry, Computer Science	
	New Library Building	UGC and College

	Indoor Stadium	UGC, Ministry of
		Youth and Sports
	Extension of Women Hostel	UGC and College
	Solar System for Energy	College
	Rain Water Harvesting	College
	Enhancement of NRC	CPE and College
	Wi-Fi in Campus	College
3	Human Resource Development and Administration	
	Conferences	
	Workshops for Teachers	
	Workshops for Students	
	Workshops for Non-teaching Staff	
	Workshops for Principals	
	Promotion of e-management,	
	Up-gradation of MIS system	
4	Extension/ ISR Activities, Others	
	Science Exhibitions	
	Avishkar	
	"Vigyan Parishad"	
	Field Visits	
	Sports Events	
	Green Audit, E-waste Management	
	Environment Awareness and Conservation	
	Quality Enhancement Activities-IQAC	

SUMMARY STATEMENT

The college has achieved most of its goals as envisioned in the master plan prepared in the 2007 for 15 years with the support from all the stakeholders. The enthusiastic students, devoted faculty, supportive staff and constant encouragement and active support from management made the mission possible.

To develop and nurture global competencies in the students and to deal with the dynamic trends in the higher education every academic institution need to strengthen its resources, upgrade modalities and reduce challenging threats. Amenities available in the institution and anticipation by every stakeholder should complement each other to achieve eventual excellence in the entire system. This demands for state of art facilities, enhanced infrastructural facilities (such as library building, non residential student's centre, indoor stadium, etc.) and modernized tools and technique for teaching, learning and evaluation.

We are confident that, we will receive the much needed support from all the stakeholders in future for fulfilling the academic development of this region's students as expected by the Founder President Dr. Panjabrao Alias Bhausaheb Deshmukh.