



ಬಿ.ಎಂ.ಎಸ್. ತಾಂತ್ರಿಕ ಮತ್ತು ವ್ಯವಸ್ಥಾಪನಾ ಮಹಾವಿದ್ಯಾಲಯ
(ವಿ.ಟಿ.ಯು. ಅಡಿಯಲ್ಲಿನ ಸ್ವಾಯತ್ತ ಸಂಸ್ಥೆ)

BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT
(Autonomous Under VTU)

Department of Mechanical Engineering



MECHINFO

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Biannual Department News Letter

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BMS Educational Trust®



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Vision of the Institute

To emerge as one of the finest technical institutions of higher learning to develop engineering professionals who are technically competent, ethical and environment friendly for betterment of the society.



Vision of the Department

To develop technically competent Mechanical Engineering professionals for the benefit of the society.



Mission of the Institute

Accomplish stimulating learning environment through high quality academic instruction, innovation and industry - institution interface.



Mission of the Department

- Impart quality education in Mechanical Engineering and allied areas by state of the art infrastructure and dedicated faculty.
- Provide conducive environment for both students and faculty to pursue higher education & research and to work ethically for the benefit of society.

Program Educational Objectives (PEOs)

Graduates of the program will:

PEO-1: Be successful professionals in the field of Mechanical Engineering and allied areas.

PEO-2: Exhibit skills to work effectively and ethically in multiple domains of engineering as part of a team.

PEO-3: Excel in higher studies, research and adapt in a world of constantly developing technology.



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HODs Desk



The National Board of Accreditation (NBA), New Delhi, has granted accreditation to the mechanical engineering undergraduate programme. The establishment of research laboratories includes equipment for 3D printing, CNC, material testing, etc. The department was founded with committed professors who hold doctoral degrees. Because of the dedication of the academics and professional staff, the department is always moving forward.

The academic staff is dedicated to giving students a top-notch education. The research are engaged in a variety of engineering-related fields, including materials, vibrations, smart materials, alternative fuels, solar energy, etc.

The department houses a centre of excellence in automotive engineering and has signed memoranda of understanding with a number of industries to facilitate research activities and industrial internships. All these activities will significantly enhance the learning ability of the students and help to build their holistic development.



Faculty – Department of Mechanical



Dr. Mohan Babu G.N

Principal & Professor

Specialization: Industrial Engineering, Business Management, Strategic planning, Technology Management, Creative Design of Engineering systems, Systems Management



Dr. H K Govindaraju

Professor & HoD

Specialization: Fatigue Fracture



Dr. K.M Sathish Kumar

Professor & Dean Academics

Specialization : Computer Integrated and Manufacturing (CIM)



Mr. T.N. Praveen Kumar

Associate Professor

Specialization : BE in Mechanical Engineering



Dr. O. Gurumurthy

Assistant Professor

Specialization : Manufacturing Engineering



Mr. K. Chandra Sekhara Reddy

Assistant Professor

Specialization : Industrial Engineering





**Dr.G.L Anantha
Krishna**

Assistant Professor



Dr.Shripad Diwakar

Assistant Professor

Specialization : Thermal Science & Engineering



Mrs.Nithya Poornima

Assistant Professor

Specialization : Computer Integrated and
Manufacturing (CIM)



Mr.Sriganesh T G

Assistant Professor

Specialization : Computer Integrated and
Manufacturing (CIM)



Mr.Sundaresh.S

Assistant Professor

Specialization : Product Design and Manufacturing



Mr.Madhu M C

Assistant Professor

Specialization : Thermal Engineering,
Renewable energy



Dr.Keerthi Kumar.N

Assistant Professor

Specialization : Thermal Engineering,
Renewable energy



Mr.Kiran M D

Assistant Professor

Specialization : Machine Design





Dr.Y.J .Jagadeesh

Assistant Professor

Specialization : Thermal Engineering



Dr.G.Avinash

Assistant Professor

Specialization : Thermal sciences
Thermodynamics & Combustion



Dr.Nagamadhu.M

Assistant Professor

Specialization : Machine Design



Dr.Ravichandra K. R

Assistant Professor

Specialization : Manufacturing Engineering



TECHNICAL STAFF – DEPARTMENT OF MECHANICAL ENGINEERING



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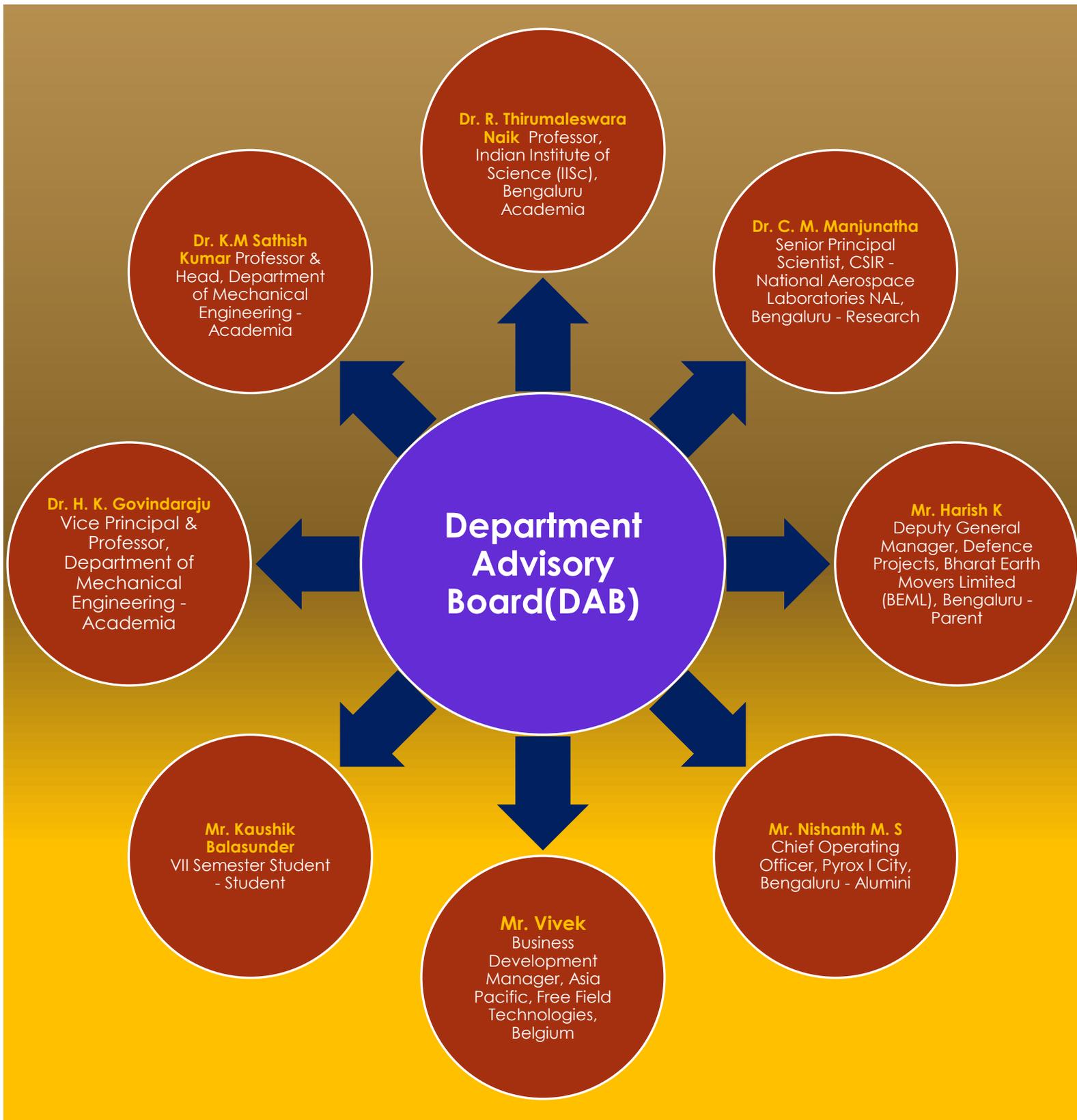
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Mr.Srinivasa.K.A

Mechanic

DEPARTMENT ADVISORY BOARD(DAB)



Reviewers

Dr. Nagamadhu M, Assistant Professor, Department of Mechanical Engineering, Reviewer for Textile Research Journal, SAGE Publications, WOS, H Index 93, Q 2, SCIE, Scopus, Impact factor 2.45.

Dr. Nagamadhu M, Assistant Professor, Department of Mechanical Engineering, Reviewer for Materials Today: Proceedings, Elsevier Publications, WOS, H Index 69, Q 2, Scopus, Impact factor 1.09.

Dr. Nagamadhu M, Assistant Professor, Department of Mechanical Engineering, Reviewer for 15th ICMPC 05th - 08th September 2023.

Dr. Nagamadhu M, Assistant Professor, Dept. Mechanical Engineering, Reviewer for Energies Journal, MDPI Publications, WOS, Scopus, Impact factor 3.2.

Dr. Nagamadhu M, Assistant Professor, Dept. Mechanical Engineering, Reviewer for Emerging Materials Research, ICE Publications, WOS, Scopus, Impact Factor 1.795.

Dr. Nagamadhu M, Assistant Professor, Dept. Mechanical Engineering, Reviewer for Symmetry, MDPI Publications, WOS, Scopus, Impact Factor 2.7.

Dr. Nagamadhu M, Assistant Professor, Dept. Mechanical Engineering, Reviewer for Archives of Advanced Engineering Science (AAES), BON VIEW PUBLISHING PTE. LTD. Scopus.



Expert Talk

Dr. Nagamadhu M, Assistant Professor, Dept of Mechanical Engineering, is a Major Speaker in the Second International Biology Conference on Science and Biological Application held from December 27-28th December 2023. The Title of the presentation is "Application of Dynamic Mechanical Analyzer for the Medical field". Held at Department of Biology, College of Education in Qurna, University of Basrain collaboration with University of Basra, College of pharmacy, National University of Science and Technology, Dhi Qar, Iraq.

Key Note Speaker

Dr. Keerthi Kumar N, Assistant Processor, Department of Mechanical Engineering, has delivered a talk on 3D printing at First Year Induction Program organized by department of Basic Science and Humanities, Sri Venkateshwara College of Engineering, Bangalore on 25th Sept 2023.

Doctoral committee member:

Dr. Nagamadhu M, Assistant Professor, Dept. Mechanical Engineering, Doctoral commentary Member (subject expert), Department of Mechanical & Industrial Engineering, Manipal Institute of Technology, Manipal.

Consultancy Work

Dr. Keerthi Kumar N, and Madhu M C, Assistant Professor, Department of Mechanical Engineering has completed consultancy work and received amount for Criyagen Agri and Bio Tech Pvt, Ltd, Bangalore on 8th Sept 2023.

Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering has completed consultancy work on 8th Oct 2023 on "Power Generation through Wind" and received amount of Rs. 9000/- form GaamaBytes Pvt Ltd, Bangalore



Journal Paper

Dr. Nagamadhu M, Assistant Professor, Department of Mechanical Engineering, published a article titled "Effect of Ghatti gum content on mechanical properties of epoxy composite using multicriteria optimization techniques" has been accepted for publication, Materials Today: Proceedings, Elsevier Publications, WOS, H Index 69, Q 2, Scopus, Impact factor 1.09.

Dr. G L Anantha Krishna, Associate professor, Mechanical Engineering Department has published a paper titled" Experimental investigations with Neodymium – Iron – Boron magnets with Aluminum circular plates to find deceleration, time taken and stopping distance" Materials Today: Proceedings, Elsevier Publications, WOS, H Index 69, Q 2, Scopus, Impact factor 1.09.

<https://doi.org/10.1016/j.matpr.2023.08.101>

Prof S Nithya Poornima M, " EFFECT OF NANO LUBRICANT ON THE TRIBOLOGICALBEHAVIOUR USING PIN ON 3 DISC TEST RIG " paper Id: GSJ/11568 in GIS Science journal Volume 10 Issue 9 september 2023.

M. D. Kiran, H K Govindaraju, Nithin Kumar, Madeva Nagaral, "Effect of CNT filler and temperature on fracture toughness of epoxy composites reinforced with carbon fabric", Engineering Reports. 2023;e12816, <https://doi.org/10.1002/eng2.12816>.



International Conference

Prof S.Nithya Poornima, Assistant Professor, Department of Mechanical Engineering presented a paper titled "Influence of the Bio-lubricant along with nano compounds as additives on the properties of the lubricant", at 2nd International Conference on Smart Sustainable Materials and Technologies (ICSSMT 2023) on 30-31 august 2023 organised by care college of engineering Tiruchirappalli, Tamil Nadu, Springer Publications

Dr. Nagamadhu M, Assistant Professor, Dept of Mechanical Engineering, published article AIP Conference Proceedings is a serial published by the American Institute of Physics, entitled "Dynamic mechanical analysis of glutaraldehyde cross linked polyvinyl alcohol under tensile mode". Scopus, H index 80, SJR 0.184.



Industrial visit

An Industrial visit to Bureau of Indian Standards, Bengaluru was organised on 18.8.2023 for students of 4th semester Mechanical Engineering. The Deputy Director –BIS, Mr Pradeep Kumar addressed the students on BIS & ISO standards and gave a holistic approach to them. The students were exposed to all the labs in BIS, Bengaluru branch office and got an insight into the technical aspects of Mechanical, Electrical and Chemical labs. Around 21 students attended the Industrial visit. Prof. Madhu MC, (Course coordinator –4th semester –Fluid Mechanics and Machinery) and Dr O. Gurumurthy (Mentor, BIS) coordinated the event.



Photos from BIS visit



CLUB ACTIVITIES:

Dr. Shripad Diwakar, Assistant Professor under the banner of SAE club participated in Indian Karting Race (IKR) -2023 competition, 8th season during 12th to 16th October, 2023 at Galgotia University and Buddha International Circuit, Greater Noida. 33 teams from all over India participated in this event. Team Motor Heads of BMSIT&M extremely performed well in different category of the event and bagged "Future award" with a cash prize of Rs.5000/= in IKR-2023 competition.



TEAM MOTOR HEADS AT IKR- 2023 COMPETITION



Dr. O. Gurumurthy, Assistant Professor, participated in the Standards Conclave-Manak Mahotsava on the occasion of World Standards Day-2023 which was held on October 14, 2023, at the Taj Vivanta, Yeshwanthpur, Bengaluru. The event was organized by the Bureau of Indian Standards (BIS), Ministry of Consumer Affairs, Food & Public Distribution, Government of India, The Standards Club at BMS Institute of Technology and Management has awarded a Certificate of Appreciation from the Bureau of Indian Standards (BIS) for a long-standing, active efforts to promote quality consciousness and scientific thinking among students.



Certificate of Appreciation



Faculty Development Program

Department of Mechanical Engineering, has organized one week Faculty Development Program On "Hydrogen Hybrid Technology for Cleaner Mobility Revolution" from 06-11-2023 To 11-11-2023 Sponsored under AICTE Training & Learning (ATAL) Academy Programme. Dr. H K Govindaraju is Coordinator and Dr. Keerthi Kumar N was co-coordinator for the programme.

Student Training Programme

Dr. Keerthi Kumar N, Assistant Processor, Department of Mechanical Engineering, has trained the final year students of Government Polytechnic, Tumkur on 3D printing on 18th and 19th Nov 2023.

Recourse Person

Dr. Keerthi Kumar N, Assistant Processor, Department of Mechanical Engineering, delivered a talk on "Various Techniques of 3D Printing" on 21st Nov 2023 at one-week online faculty development programme on "Exploring Engineering in IoT, Mechatronics, Automation, Additive Manufacturing and Electric vehicles-EEIMAE-23" organized by RNSIT, Bangalore.



Online course completion

Dr. Keerthi Kumar N, Assistant Professor, Department of Mechanical Engineering, completed 12 weeks course from NPTEL on "Introduction to Internet of Things" obtained Elite Certificate. Prof S.Nithya Poornima successfully completed the course Complete "C# Masterclass" on 11/21/2023 as taught by Denis Panjuta, Tutorials.eu by Denis Panjuta on Udemy. The course duration represents the total video hours of 45.5 hours of the course at time of most recent completion.

Faculty Internship:

Prof K Chandra Sekhara Reddy, Prof S Sundaresh and Prof Sriganesh T G , Assistant Professor, attended a "Faculty Internship " at NBR tooling solutions, Doddaballapur industrial area since 12th October 2023 to 21st October 2023.



Workshop:

A Memorandum of Understanding (MoU) is signed between BMS Institute of Technology and Management (BMSIT&M), Bengaluru & Bureau of Indian Standards (BIS) for collaborative activities in the areas of Standardization and Conformity Assessment.

The signing of MoU and a day-long workshop on standardization was organized at BMS Institute of Technology and Management on 20th December 2023.



Signing of MoU with BIS and a Day-long workshop on "Standardization"



Tech-Transform was organized at on 22 and 23th December 2023. The following activities such as Bob the Builder – group, RC car – individual, Hydro blast – individual, Fasteners Assemble – Group and Buzzer – individual. **Dr. Nagamadhu M**, Assistant Professor, Dept of Mechanical Engineering coordinator for Tech Transform 2023 which is held 22 and 23 Dec 2023.



Hydro blast



Buzzer



Articles

An edge for young minds (Influenced by the Author Sorin Dumitrescu)

Life is full of challenges and obstacles. It's how we respond to these challenges that determines our level of success and happiness. Being flexible is a crucial skill that can help us overcome adversity and thrive in the face of difficult situations. Flexibility is indeed the need of every young minds and has to be imbibed in our life. It is the ability to bounce back from setbacks, maintain a positive outlook, and keep moving forward when faced with challenges. It's important to remember that you don't have to go through tough times alone. When facing a challenging situation, it's easy to feel overwhelmed and isolated. Having a support network can help alleviate these feelings and provide much-needed emotional support and guidance.

Your support network can consist of friends, family, co-workers, or even a therapist. It's important to reach out to those who you trust and feel comfortable with. Surrounding yourself with positive and supportive people can be a great source of strength when you need it most.

Building a support network may take time and effort, but it's worth it. Remember to communicate openly with those in your network and to reciprocate their support when they need it. By building a strong support network, you'll be better equipped to navigate adversity and thrive in the face of challenges.

Self-care can take many forms, and it is important to find what works for you. It can be as simple as taking a few minutes each day to meditate or do some deep breathing exercises. It can also mean taking the time to do something you enjoy, like reading a book or taking a walk-in nature.

It's important to have a plan in place for when things get tough, by analysing what went wrong and what could be done differently, you can turn a negative experience into a valuable lesson and grow from it. It can be difficult to make clear decisions when you're feeling overwhelmed or stressed. Having a clear plan in place can help you stay focused and make rational decisions, even in difficult circumstances. Finally, creating a positive work environment that values diversity, inclusivity, and empathy can help you build confidence and a sense of accomplishment.

By

Prof S.Nithya Poornima

Assistant professor



KEEP BRAIN SHARP AND ACTIVE

In today's world there is a fierce competition in education, growth in profession and success. It has reached dangerous proportions. Everybody is trying very hard to be on top in every aspect of life. Satisfaction levels are pretty less even after having more than required money to spend. Everybody is in a mad rush to achieve something unreal. All these are leading to severe mental disorders. Also, these are leading to diseases like dementia, Alzheimer's. Hence, it is very important to keep the mind sharp and active. To keep the brain in healthy condition, following would act as pillars of good brain health.

Physical activities : Physical exertion has been documented scientifically to improve brain health and condition. Hence, it is very important to have physical activities. It is suggested that 45 minute walk and exercises daily or yoga session or 10000 steps a day is extremely helpful for keeping brain sharp.

Learning : Learning is found to help substantially to strengthen brain if one is active in learning new things like new language or music or painting etc.

Calming down : Improper or poor sleep can lead to impaired memory and persistent stress can impair ability to learn and adapt to new situations. Hence it is suggested to engage in stress reducing activities like meditation, listening to soothing music and restorative sleep on nightly basis.

Nourishment : Foods such as whole grains, nuts, seeds, fibrous whole fruits and vegetables are found to help avoid memory and brain decline. Foods that are to be avoided are those in high sugar, saturated fat and Trans fatty acids.

Bonding : Having varied social network can improve brain's ability and preserve our cognitive abilities. Interacting with other positively helps reduce stress and improve overall immune system.

By

DR.G L ANANTHA KRISHNA



Associate Professor



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Bull Temple Road, Bengaluru
www.bmsce.in

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www.bmscl.ac.in

BMS PU College for Women
Buglerock Road, Bengaluru
www.bmscw.edu.in

BMS Degree College for Women
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www.bmscw.edu.in

BMS Evening College of Engineering
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www.bmsece.in

BMS School of Architecture
Avalahalli, Yelahanka, Bengaluru
www.bmssa.ac.in

BMS Training & Research Institute
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BMS Centre for Executive Education & Distance Learning
KL Road, V V Puram, Bengaluru
www.bmsceedl.com

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www.bmseca.ac.in

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Bull Temple Road, Bengaluru
www.bmsca.org

BMS College of Commerce & Management
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www.bmsccm.in



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