



Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

## APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:27-06-2021

Department	CIVIL ENGINEERING	Application No.	202110090
Area of Research	STRUCTURAL ENGINEERING	Research Mode	PART TIME

**Name** :BINOL VARGHESE  
**Date of Birth / Age** :24-08-1992 / 28 Years  
**Gender** :MALE  
**Category** :OC  
**e-Mail ID** :eng.bvc@gmail.com  
**Mobile** :9400278349



<b>Father's/Husband's Name</b>	VARGHESE	<b>Father's/Husband's Occupation</b>	FARMER
<b>Family Income</b>	400000	<b>Residential Type</b>	RURAL
<b>Birth Place</b>	KOTHAMANGALAM	<b>Mother Tongue</b>	MALAYALAM
<b>Religion</b>	CHRISTIAN	<b>Martial Status</b>	MARRIED
<b>Aadhaar No.</b>	473922378977	<b>PAN No.</b>	AQNPV9460C
<b>Physically Challenged</b>	NO	<b>Type of Disability</b>	-
<b>Address for Communication:</b> CHETTIYAMKUDIYIL HOUSE KOZHIPPILLY PO KOTHAMANGALAM ERNAKULAM DISTRICT KERALA INDIA Pin-686691		<b>Permenant Address:</b> CHETTIYAMKUDIYIL HOUSE KOZHIPPILLY PO KOTHAMANGALAM ERNAKULAM DISTRICT KERALA INDIA Pin-686691	

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
B.TECH	CIVIL ENGINEERING	MAHATMA GANDHI UNIVERSITY, KOTTAYAM	2013	73.4	FIRST CLASS	REGULAR
M.TECH	COMPUTER AIDED STRUCTURAL ENGINEERING	KANNUR UNIVERSITY	2015	73.5	FIRST CLASS	REGULAR

Experience				
Organization	Designation	Experience From	Experience TO	Work Nature
MUTHOOT INSTITUTE OF TECHNOLOGY AND SCIENCE, ERNAKULAM	ASSISTANT PROFESSOR	2020-01-01	1970-01-01	TEACHING
MGM COLLEGE OF ENGINEERING AND TECHNOLOGY	ASSISTANT PROFESSOR	2017-08-01	2019-12-31	TEACHING
COCHIN INSTITUTE OF TECHNOLOGY AND SCIENCE	ASSISTANT PROFESSOR	2016-06-27	2017-06-24	TEACHING

Payment Details				
Transaction ID	Reference	Date of transaction	Amount	Status
202110090_210705224238	VHD40092167327	05-07-2021	600	SUCCESS

## **Effect of Damping Ratio on Rigid Response Coefficient for Modal Response Combination of Non-Classically Damped Structures**

Using classical damping for non-classically damped systems like nuclear power plant piping systems supported by stiff structures, coupled building piping or equipment and soil structure interaction system of structures, may lead to inaccurate calculation of responses. In high frequency region of the spectrum modal responses are rigid and combines algebraically irrespective of whether the modes are near or far away. United States Nuclear Regulatory Committee, USNRC 1.92, rev3 (2012) recommends the Gupta method for the modal combination of the responses which contains a rigid and damped periodic part. The empirical expressions for rigid response coefficient are based on a straight-line fit between a key frequency  $f_1$  and a rigid frequency  $f_r$  which is independent of damping. The modal response combination of modal responses of non-classically damped structures involves modal correlation coefficients based on relative displacement-based spectrum and relative velocity-based spectrums. In previous studies, the effect of damping on the rigid response coefficient for non-classically damped systems is expressed as a parabolic variation from the straight-line fit based on 12 earthquakes. All the relevant parameters required for the modal response combination of non-classically damped systems whose response contains a rigid as well as periodic part are expressed in terms of empirical relations based on these earthquakes. The relative velocity-based parameters required for the modal response combination of non-classically damped structures are expressed in terms of relative displacement-based parameters. Consideration of parameters based on an average of 12 earthquakes has its own limitations. Further the recent studies show that rigid frequency also varies according to the damping ratio. The spectral curve with a higher damping ratio becomes rigid at a lower frequency when compared to another spectral curve with a higher damping ratio. Similar results are observed for rigid response coefficient based on a relative velocity-based spectrum. Therefore, it is proposed to develop an expression for rigid response coefficients based on the numerical studies using 40 earthquake ground motions which can be used for different damping ratios for the modal response combination of non-classically damped structures. The corresponding key frequencies, rigid frequencies and cross correlation coefficients will be studied in detail.

Register No : 208240

Month & Year : May 2013

# Mahatma Gandhi University

(Established by Kerala State Legislature by Notification No. 3431/Leg.C1/85/Law, dated 17th April 1985)



## FACULTY OF ENGINEERING AND TECHNOLOGY

*The Syndicate of the Mahatma Gandhi University*

*hereby makes known that*

**BINOL VARGHESE**

*has been admitted to the*

**Degree of Bachelor of Technology**

*under Civil Branch he having been certified by duly appointed examiners to be qualified to receive the same and having been by them placed in the*  
**FIRST CLASS** *at the examination held in* **May 2013.**

*Given under the seal of the University*





## FACULTY OF ENGINEERING

*Whereas it has been certified by duly appointed Examiners that*

***BINOL VARGHESE***

*is qualified to receive the Degree of Master of Technology in Engineering (M.Tech)  
in Civil Engineering with Specialisation in  
Computer Aided Structural Engineering.*

*he having been placed in First Class*

*at the Examinations held in*

*May 2015 with Register Number: B3MTCE1506*

*The Syndicate of Kannur University hereby confers on him the Degree of  
**Master of Technology in Engineering (M. Tech)***

*With all the Rights, Privileges and Honours thereunto appertaining.*

*Given under the seal of the University.*



A handwritten signature in blue ink, consisting of a stylized 'D' followed by a horizontal line and a flourish.

VICE-CHANCELLOR

Kannur University

Date 21 July 2016

# Mahatma Gandhi University

(Established by Kerala State Legislature by Notification No 3431/Leg. C/85 Law dated 17th April 1985)

Section: EI-I  
Serial No.: 1369971

Student ID: EAAB2009G028078477



Kottayam,

19-Aug-2013

## MEMORANDUM

The following marks were awarded to Shri./Smt **BINOL VARGHESE** candidate with Register No. **208240** at the Eighth Semester B Tech Degree Examination May 2013

SUBJECTS	Marks								
	External			Internal			Total		
	Awarded	Min for Pass	Max	Awarded	Min for Pass	Max	Awarded	Min for Pass	Max
<b>FACULTY OF ENGINEERING AND TECHNOLOGY</b>									
<b>BRANCH: CIVIL ENGINEERING</b>									
A. Advanced Structural Design	69	40	100	45	-	50	114	75	150
B. Finite Element Analysis	73	40	100	48	-	50	121	75	150
C. Building Technology and Management	59	40	100	44	-	50	103	75	150
D. Environmental Engineering - II	61	40	100	37	-	50	98	75	150
E. Elective II: Theory of Shells	68	40	100	47	-	50	115	75	150
F. Elective III: Structural Dynamics and Stability Analysis	76	40	100	43	-	50	119	75	150
G. Environmental Engineering Lab	75	40	100	43	-	50	118	75	150
H. Project and Seminar	-	-	-	89	-	100	89	-	100
I. Viva-Voce	40	20	50				40	20	50
<b>TOTAL FOR SEM VIII</b>							<b>917</b>	<b>600</b>	<b>1200</b>
<b>TOTAL FOR SEM I and II</b>							<b>1118</b>	<b>750</b>	<b>1500</b>
<b>TOTAL FOR SEM III</b>							<b>893</b>	<b>600</b>	<b>1200</b>
<b>TOTAL FOR SEM IV</b>							<b>821</b>	<b>600</b>	<b>1200</b>
<b>TOTAL FOR SEM V</b>							<b>814</b>	<b>600</b>	<b>1200</b>
<b>TOTAL FOR SEM VI</b>							<b>904</b>	<b>600</b>	<b>1200</b>
<b>TOTAL FOR SEM VII</b>							<b>902</b>	<b>600</b>	<b>1200</b>
<b>GRAND TOTAL</b>							<b>6369</b>	<b>4350</b>	<b>8700</b>
							<b>(Six Three Six Nine)</b>		
*****End of statement*****									

Checked by:

Section Officer:



CONTROLLER OF EXAMINATIONS

Scanned with CamScanner

# KANNUR UNIVERSITY



Folio No.  
1182605

Civil Station P.O.  
Kannur, Kerala - 670 002  
21.05.2016

Date

## GRADE CARD

Programme : **M-Tech. Computer Aided Structural Engineering (CAS)**

Semester : **Third & Fourth Semester**

College : **Government College of Engineering, Kannur.**

Name : **BINOL VARGHESE**

Register Number: **B3MTCE1506**

SEMESTER	SESSION	MARKS AWARDED			MAXIMUM MARKS			CREDITS	GRADE (GP)	CREDIT POINT	SGPA	STATUS
		ESA	CA	TOTAL	ESA	CA	TOTAL					
III SEMESTER (THESIS PRELIMINARY)	MAY 2015	--	335	335	--	400	400	8	A	72	9	PASSED
IV SEMESTER (THESIS FINAL)		173	345	518	200	400	600	12	A	108	9	PASSED

### MARKS CARRIED OVER FROM PREVIOUS SEMESTERS

I SEMESTER	APR 2015	411	343	754	700	400	1100	22	C	162	7.36	PASSED
II SEMESTER	JULY 2014	426	320	746	700	400	1100	22	C	163	7.41	PASSED

### RESULT

TOTAL CREDITS	TOTAL CREDIT POINTS	CGPA	STATUS
<b>64</b>	<b>505</b>	<b>7.89</b>	<b>FIRST CLASS</b>

CA = Continuous Assessment (Sessional Mark)      ESA - End Semester Assessment (University Exam Mark).  
Credit Points = Grade points x Credits for the course.      SGPA = Total Credit Points/Total Credits (of a semester).  
CGPA: Total credit points/Total Credits (of the programme).  
Grade Point S=10, A=9, B=8, C=7, D=6, E=0.



Marks entered by *R*.....

Marks checked by *ICP*.....

*[Signature]*  
CONTROLLER OF EXAMINATIONS

*[Signature]*  
Section Officer

*[Signature]*  
A.R./D.R. (Exams.)

**To whomever it may concern**

Application Number: 202110090

Date of Application: 2021-06-27

Area of Research: Structural Engineering

Department: Civil Engineering

Name of Applicant: Binol Varghese

Due to the Covid-19 pandemic situation in Kerala State, I couldn't collect my transfer certificate from my college.

I informed the support team regard the same over the phone.

I will submit the transfer certificate at the time of next process.

Kindly consider my application.



# Cochin Institute of Science and Technology

PRINCIPAL  
Cochin Institute of Science and Tech  
Muvatupuzha, Ernakulam





# MGM

## COLLEGE OF ENGINEERING AND TECHNOLOGY

MGM TECHNOLOGICAL CAMPUS, PAMPAKUDA

Approved by AICTE & Affiliated to APJ Abdul Kalam Technological University



MGM CET/AD/B1/FL -012/2019-20

31.12.2019

### CERTIFICATE

This is to certify that Mr. Binol Varghese, Chettiyamkudiyil House, Kozhipilly P.O, Kothamangalam, Pin-686691 was working as Assistant Professor in the Civil Engineering Department of this college from 01.08.2017 to 31.12.2019.

During the tenure of his service in this Institution, his Conduct and Character were Very Good. He was reliable employee of this Institution, executing entrusted duties with perfection.

He is relieved of his duties in this Institution from 31.12.2019 A.N, as per his request.

We wish him all success in his future endeavors.



*R Mani*

**PRINCIPAL**

DR. T.K. MANI  
PRINCIPAL  
MGM COLLEGE OF  
ENGINEERING AND TECHNOLOGY  
PAMPAKUDA-686 697

आयकर विभाग

INCOME TAX DEPARTMENT



सत्यमेव जयते

भारत सरकार

GOVT. OF INDIA

BINOL VARGHESE

VARGHESE

24/08/1992

Permanent Account Number

AQNPV9460C

Signature



09092012



ഇന്ത്യ തിരഞ്ഞെടുപ്പ് കമ്മീഷൻ  
ELECTION COMMISSION OF INDIA



സമൂഹീകൃത ചിത്രം ഉപയോഗിച്ചുള്ള തിരഞ്ഞെടുപ്പ് കമ്മീഷൻ - ELECTOR PHOTO IDENTITY CARD



IAD0178509



പേര്

: ബിനോൾ വർഗീസ്

NAME

: Binol Varghese

അച്ഛന്റെ പേര്

: വർഗീസ്

FATHER'S NAME

: Varghese

भारत निर्वाचन आयोग

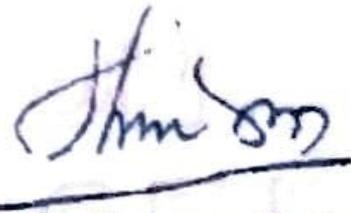
ലിംഗം/ SEX : പുരുഷൻ / Male

ജനനത്തീയതി / വയസ്സ്

DATE OF BIRTH/AGE : 24/08/1992 / 22

മേൽവിലാസം : 1/5, ചെട്ടിയാങ്കുടിയിൽ, കോഴിപ്പിള്ളി  
686691

ADDRESS : 1/5, Chettiyamkudiyil, Kozhippilly  
686691



ഇലക്ടറൽ രജിസ്ട്രേഷൻ ഓഫീസർ

Date: 20/09/2015 ELECTORAL REGISTRATION OFFICER

അസംബ്ലി നിയോജകമണ്ഡലം : 87, കോതമംഗലം  
നമ്പരും പേരും

ASSEMBLY CONSTITUENCY No. & : 87,  
NAME KOTHAMANGALAM

പാർട്ടി നമ്പർ : 102  
PART No.

NOTE / കുറിപ്പ്

1. Mere possession of this card is no guarantee that you are elector in the current electoral roll. Please check your name in the current electoral roll before every election.

ഈ കാർഡ് കൈവശമുള്ളത് കൊണ്ട് മാത്രം നിങ്ങൾ നിലവിലുള്ള വോട്ടർ പട്ടികയിൽ ഒരു സമ്മതിദായകൻ ആകണമെന്നില്ല. ഓരോ തിരഞ്ഞെടുപ്പിനും മുമ്പായി നിലവിലുള്ള വോട്ടർ പട്ടികയിൽ നിങ്ങളുടെ പേര് ഉണ്ടോയെന്ന് പരിശോധിക്കേണ്ടതാണ്.

2. Date of Birth mentioned in this card shall not be treated as a proof of age/D.O.B. for purposes other than registration in electoral roll.

ഈ കാർഡിൽ സൂചിപ്പിച്ച ജനനത്തീയതി വോട്ടർ പട്ടികയിൽ രജിസ്റ്റർ ചെയ്യുന്നതിന് മുമ്പായി ജനനത്തീയതിവയസ് തെളിയിക്കുന്നതിനുള്ള ഒരു രേഖയായി പരിഗണിക്കേണ്ടതാണ്.

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