

## **Our Vision**

"Progress Through Education"

### **Our Mission**

"To seek, strive for and scale greater heights of quality education"

# VIDYA ACADEMY OF SCIENCE & TECHNOLOGY

(A Unit of Vidya International Charitable Trust)

THALAKKOTTUKKARA P.O, THRISSUR – 680 501, KERALA

TEL:- 04885 – 287751/287752, FAX:- 04885 – 288366

EMAIL:-principal@vidyaacademy.ac.in

(ISO 9001 – 2015 Certified Institution)

Approved by AICTE and affiliated to APJ Abdul Kalam Technological University.

# **PROSPECTUS**

for admission to

# **B.Tech PROGRAMME 2023**

Help lines

B.Tech: 8281 795555 M.Tech: 8281 595555 MCA: 8281 395555

Visit website www.vidyaacademy.ac.in for ONLINE application

"Our Vidya Our Pride"



# VIDYA ACADEMY OF SCIENCE & TECHNOLOGY

THALAKKOTTUKKARA P.O, THRISSUR - 680 501, KERALA

# ADMISSION 2023 (B.Tech)

Will be notified in the college website after notification of B.Tech admission schedule to be issued by the Director of Technical Education, Govt. of Kerala.

#### 1. INTRODUCTION

Vidya Academy of Science and Technology (VAS) is an NRI venture in the field of technical education established in the year 2003 and is situated in Thrissur, the cultural capital of Kerala. From a humble start with 240 students in four branches of Engineering in 2003 the college has grown to the present strength of admitting 480 students in six branches of B.Tech, 78 students in B Tech LE, 60 students in MCA and 18 students in M.Tech.

VAS has become a trendsetter in professional education in the state by providing maximum opportunities to its students to avail themselves of scholarships through the 'VAS Scholarship Program'. This scheme, introduced in 2003, has provided various scholarships to 2400 meritorious students till date. Also, VAS offers several endowments and other financial assistance to help needy students from financially and socially backward sections of the society.

Our students have brought laurels to the institution with consistent academic excellence and also are placed in many top public and private sector companies. Our students have been regularly bagging university ranks in various branches/courses of their study.

This prospectus contains general information and rules relating to Admission to B.Tech courses 2023 - 24 and other connected matters. Candidates/parents are requested to go through the prospectus carefully and acquaint themselves with all the relevant information about the admission procedure to this college. Candidates and parents are also requested to visit the college website **www.vidyaacademy.ac.in** regularly for detailed information, notification and announcements.

#### Names of important functionaries

Sl No	Name	Designation	email Id				
1	Suresh Lal	Executive Director	sureshlal@vidyaacademy.ac.in				
2	P.N. Unnirajan	Director Administration	unnirajan@vidyaacademy.ac.in				
3	Dr Saji C B	Principal	principal@vidyaacademy.ac.in				

#### Message from the Principal

"At VAS, we give the finest quality of education to the students and continue to inspire the generations to come. We believe in the holistic development of individuals and handholding them to become competent professionals capable of assuming leadership in their chosen frontiers.

The qualifications and academic contributions of faculty members, high-class infrastructure facilities, quality teaching-learning process, academic level of our students, and the strong alumni network have been contributing to our commendable accomplishments in academic results and placements through campus recruitments.

We welcome aspiring students and their parents to VIDYA FAMILY, for experiencing a campus that exposes you to a different academic experience that could be your stepping stone for a successful future." - Principal

#### **COURSES & SEATS**

S1 No	M.Tech	Total Intake
1	Structural Engineering	12
2	Embedded Systems	6

#### Other courses offered\*

S1 No	Courses	Total Intake								
	UG Courses (B.Tech)									
1	Civil Engineering	60								
2	Computer Science & Engineering	180								
3	Electronics & Communication	60								
	Engineering									
4	Electrical & Electronics Engineering	60								
5	Mechanical Engineering	60								
6	Artificial Intelligence and Machine	60								
	Learning									
	PG Courses									
1	Master of Computer Applications (MCA)	60								

#### General Notes:-

- The distribution of seats to Government/Management/NRI in various courses is subject to final decision and agreement between the Govt. of Kerala and Kerala Self Financing Engineering Colleges Management Association (KSFECMA) for the academic year 2023-24.
- Additional/supernumerary intake, like the seats under EWS quota, sanctioned from time to time by authorities will be available based on respective orders.
- Distributions of seats in MCA are subject to conditions as per MCA Prospectus 2023 (Published by LBS/DTE).

#### 2. DURATION OF COURSES

- a) M.Tech course will be completed over a period of 2 years consisting of 4 semesters.
- b) B.Tech degree course will be completed over a period of 4 years consisting of 8 semesters.

- c) B.Tech (LE) students will complete the course over a period of 3 years consisting of 6 semesters.
- d) MCA course will be completed over a period of 2 years consisting of 4 semesters.

#### 3. ACADEMIC ELIGIBLITY

#### A. Eligibility Criteria for M.Tech Admission

- a. The candidates shall be an Indian National.
- b. The candidate should have studied the graduate course in an institution approved by the AICTE / UGC approved deemed universities in India.
- c. In case of candidates who have started the graduate course in foreign universities, an equivalency certificate from APJ Abdul Kalam University is to be produced.
- d. Candidates, who have passed AMIE/AMIETE Examinations and satisfying the following conditions, are eligible for admission.
  - i) They must have valid GATE score.
  - ii) A minimum of 55% marks for section B in AMIE/AMIETE examination.
- e. The candidate should have a minimum CGPA of 6.0 in a 10 point scale in the Engineering Degree Examination.
- f. Candidates who have appeared for the final semester examination can also apply, provided he /she has passed all the subjects up to and including the 6th semester exam (8th semester for B. Arch students). Confirmation of admission of such candidates shall be subject to the production of qualifying degree before the date stipulated by the affiliated University.
- g. Admission shall normally be offered to candidates preferably with valid GATE score. However, this stipulation is relaxed in the case of Sponsored candidates
- h. In case seats remain vacant due to lack of candidates with valid GATE score, candidates from Kerala State without valid GATE score will be considered. If seats are still remaining vacant, candidates from other States will be considered for admission
- i. Candidates should produce conversion formula of their CGPA score if the same is not specifically stated in the mark list or certificate. Otherwise the conversion

formula of APJ Abdul Kalam Technological University (2015/2019 scheme) will be taken

## B. Eligibility Criteria for B.Tech Admission in Govt Quota

- a) Candidates who have passed Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with Physics and Mathematics as compulsory subjects and Chemistry as one of the optional subject with at least 45% marks put together in the above subjects are eligible for admission. In case, the candidate has not studied Chemistry, the marks obtained in Computer Science shall be considered. In case, the candidate has not studied Chemistry and Computer Science the marks obtained in Biotechnology shall be considered. In case, the candidate has not studied Chemistry, Computer Science and Biotechnology the marks obtained in Biology shall be considered. The marks as shown in the mark list of the Board of Examination obtained from the respective Higher Secondary Board shall be considered for academic eligibility.
- b) Candidates should have passed and be ranked in the KEAM-2023.

#### C. Eligibility Criteria for B.Tech Admission in Management Quota

- a) Candidates who have passed Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with 45% marks in Mathematics, Physics and Chemistry put together.
- b) Qualified and ranked in the KEAM-2023/JEE-2023.

#### D. Eligibility Criteria for B.Tech Admission in NRI Quota

- a) Candidates who have passed Higher Secondary Examination, Kerala, or Examinations recognized as equivalent thereto, with 45% marks in Mathematics, Physics and Chemistry put together.
- b) Qualifying in any entrance exam (KEAM-2023/JEE-2023) is not essential for NRI admission.

#### E. Eligibility Criteria for B.Tech LE Admission (Govt. &Mgt.)

- a) Diploma in engineering (3 years /2 years (Lateral Entry) course) awarded by the State Board of Technical Education or Equivalent with at least 45% marks (40% in the case of reserved category).
- b) Candidates who have passed B.Sc degree from a recognized university as defined by the UGC with Mathematics at 10+2 level.
- c) Candidates who have passed D.Voc (Vocational Diploma) stream in the same and allied sector in Engineering / Technology awarded by any state board of Technical Education or Institutions under Govt. of India with at least 45% marks (40% in the case of reserved category).
  - d) Qualified in the B.Tech LET 2023 entrance exam.

#### F. Eligibility Criteria for MCA Admission (Govt. &Mgt.)

- a) Candidates should have Passed B.C.A/ B.Sc.(Computer Science)/ B.Sc.(IT)/B.E.(CSE)/B.Tech.(CSE)/B.E.(IT)/ B.Tech.(IT) or equivalent Degree.
- b) Candidates who Passed B.E / B.Tech. / B.Sc. / B.Com. /B.A./ B.Voc./etc with Mathematics at 10+2 Level or at Graduation Level (with additional bridge Courses as per the norms of the concerned University).
- c) Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
- c) The candidates seeking admission to MCA course should have a valid score, in the entrance test conducted by LBS. The candidates who have not qualified in the entrance examination cannot be considered for admission to MCA Course
- e) Admission to MCA Course shall be based on the norms of the AICTE, Regulation of the University and as per the Prospectus issued by the DTE and approved by the Higher Education Department, Govt. of Kerala.

#### 4. RELAXATION OF ACADEMIC ELIGIBILITY

#### A. M.TECH -RELAXATION OF MARKS (Govt. Quota Admission)

a. For SEBC (OBC) students, the minimum CGPA requirement is 5.5 in a 10 point scale. Wherever the credit system is/was followed, only CGPA will be considered for selection. If the candidate has obtained the bachelor's degree in Engineering from a University where credit system is/was not followed, he/she should have a minimum of 60% aggregate marks (For SEBC /OBC students, a minimum of 55% aggregate marks in the Engineering Degree examination is mandatory). For SC/ST candidates a pass in the Engineering Degree Programme is sufficient.

#### B. B.TECH -RELAXATION OF MARKS (Govt. Quota Admission)

- a. Following category of candidates are eligible for a relaxation of 5% of marks, provided their total annual income is within Rs. 8 Lakhs (subject to Govt. Orders)
  - SEBC
  - Persons with Disabilities(PD)
- b. The SC/ST candidates need only pass marks in the qualifying examination

#### C. MCA -RELAXATION OF MARKS (Govt. Quota Admission)

- a. The aggregate mark required is 45% in SEBC and physically handicapped candidates.
- b. Minimum required pass marks in the degree examination is sufficient in SC/ST candidates.

#### 5. SYLLABUS

The Curriculum for B.Tech, B.Tech LE, MCA and M.Tech courses will be as per the details published by APJ Abdul Kalam Technological University.

(https://ktu.edu.in/eu/acd/curriculumSyllabusCommittee.htm)

#### 6. HOW TO APPLY FOR ADMISSION TO MANAGEMENT SEATS

ONLINE Application only will be invited through the college website www.vidyaacademy.ac.in as per date stipulated by authorities and by remittance of Rs.500/- towards application & Prospectus fee. Print copy of the ONLINE application form is required to be submitted to the college along with the required documents before the closing date of the application. The online application form will contain auto generated registration/application number and auto generate date and time of application. Educational certificates, submission of photograph, signature and relevant certificates to claim the eligibility of the candidate are also to be uploaded. The category shall be clearly specified in the online application form. The category once selected shall not be changed under any circumstances. Printing and photocopy facilities are available in the college.

#### 7. ALLOTMENT OF MANAGEMENT SEATS AND ADMISSION

#### • M TECH

- (a) A rank list will be prepared, which will include all the eligible applicants as per clause 3.
- (b) The College will conduct admission from this rank list, after inviting separate application and ascertaining the eligibility for admission as per the norms of the University and following the statutory reservation policy. For filling up of 50% seats, the college will resort the rank list published by DTE and in the absence of candidates in the rank list by the DTE, other eligible candidates from the rank list prepared by the college will be considered.
- (c) Allotment of management seats will be as per the guide lines issued by authorities time to time.
  - a) All applications received online up to the notified last date will be considered for allotment of seats as per availability of seats.
  - b) Candidates will be ranked based on their mark/rank in their entrance examination and marks scored in the qualifying exam or as per directions received from time to time issued by LBS or the Director of Technical education, Govt. Of Kerala whichever is applicable. Candidates are required to login in to the ERP system of the institution to know their rank.

- c) Students and parents are advised to visit college web site regularly. Counseling for seat allotment and admission will be held in the college as per admission schedule notified in the website. Parents/Guardian should accompany the candidates appearing for counseling
- d) All original documents and complete fees for the semester are to be deposited by the candidates at the time of admission.
- e) All original documents shall be returned after verification and completion of registration in KTU web portal.
- f) List of documents to be submitted at the time of admission are given in page 13. Fees structure for courses is given in page 15.

Note - The procedures are subject to change based on guidelines issued by Govt./ Authorities from time to time.

#### 8. HOSTEL FEES

Well-furnished campus hostel facilities are available for students with the capacity to accommodate 200 boys and 400 girls.

The current rate of Hostel fees are as follows

S1 No	Item	Periodicity	Amount		
1	Admission Fee	One Time	1000.00		
2	Rent and Mess charges*	Monthly	5,800.00		
3	Caution Deposit	One Time	10,000.00		

<sup>\*</sup>Rates are subject to revision by Management

#### 9. CANCELLATION OF ADMISSION

No cancellation of admission is permitted after the admission is declared as closed. Cancellation after closing date will be subject to payment of liquidated damages as stipulated by AICTE Norms/Govt. Orders.

#### 10. SCHOLARSHIPS

This college provides a number of scholarships under various categories to support meritorious and needy students to complete their studies. Students are advised to apply for the scholarships under eligible category and submit for the same with all supporting documents before **30**th **September 2023** for considering them for these scholarships.

Sl.No. Name of Scholarship	Course	No	Eligibility Criteria			
		s				

1	Vidya Merit - cum - means Full Fee Scholarships for socially and economically backward students.	B.Tech LE MCA	03	Family income not more than Rs. 1,50,000/- per annum. Admission through Management or Govt. Merit Quota of Kerala Government Entrance Exam.
2	Vidya Excellence Full Fee Scholarships for Entrance toppers	B.Tech	10	1-5000 Rank holders in Kerala Government Entrance Exam.
3	VIDYA - AICTE Full Fee Waiver Scholarships	B.Tech	21	Admission under Govt. Merit Quota – Family Income not exceeding Rs.6 lakhs.
4	Vidya Merit cum means Half Fee Scholarships	B.Tech LE MCA	12 03 03	Family income not more than Rs. 1,50,000/- per annum Admission through Govt. Merit Quota of Kerala Government Entrance Exam.
5	Vidya Full Fee Arts & Sports Scholarship	B.Tech	01	State/National level achievers in Arts/Sports events.
6	Vidya Half Fee Arts & Sports Scholarship	B.Tech	01	State/National level achievers in Arts/Sports events.
7	Vidya PTA Merit cum Means Scholarship by PTA	B.Tech LE	02 02	Family income not more than Rs.150000/- per annum
8	Vidya Alumni Merit cum Means Scholarship by Vidya Alumni Association	B.Tech	02	Family income not more than Rs.150000/- per annum
9	Vidya Principal's/Dean Scholarship for needy students	B.Tech	02	Based on academics & income merit
10	Vidya Full Fee Scholarship for wards of Staff	B.Tech	01	Eligible for wards of Non faculty staff based on academic & income merit
11	Vidya Half Fee Scholarship for wards of Staff	B.Tech	01	Eligible for wards of Non faculty staff based on academic & income merit

#### 11. COLLEGE FACILITIES AND REGULATIONS

#### a. General

Vidya Academy of Science & Technology is situated in idyllic location, near Kechery and 2km away from Kaiparambu junction on the Thrissur - Guruvayoor state highway. Within a short span of time the college has achieved recognition as a notable school of Engineering with its competent and committed faculty, state-of-the-art infrastructure and high technology teaching aids, and by providing a serene atmosphere that complements

academic life.

#### b. Working Hours

Classes: Timings as stipulated by Higher Education Dept./ University

#### c. Caution against Ragging

Ragging/any type of misconduct towards any student either in the college campus or outside will be considered as a criminal offence, and will be immediately reported to the Police authorities. Perpetrators will not be permitted to continue the studies. The Court orders related to this subject will be strictly followed. A Discipline cum Anti Ragging Squad as envisaged by the Supreme Court is functioning in the college.

#### d. Attendance

Attendance is compulsory throughout the period of the course as stipulated by University regulations.

#### e. Examinations

Curriculum followed is as prescribed by the APJ Abdul Kalam Technological University.

#### f. Staff

The 100% of the faculty are with post- graduate or above qualifications. The list and details of faculty members are available in our college web portal in the below mentioned link.

https://vidyaacademy.ac.in/departments.php

#### g. Online Classes

The college is fully equipped for conducting online classes to all students

#### h. Uniform

The college has a prescribed dress uniform for the students and they are expected to be in the campus in the prescribed uniform except on Fridays and special occasions. Dress code has to be strictly adhered to. Identity card should be properly displayed. Over coat and shoes are to be worn during workshop and laboratory classes.

#### i. Student's Grievance Redressal Committee

	GRIEVANCE & REDRESSAL COMMITTEE								
1	Dr. Saji C B	Principal (Chairperson)							
2	Mr. Anil Kumar K R	(ME Dept.)							
3	Mr. Anil M	(ECE Dept.)							

4	Ms. Shameem S	(CSE Dept.)
5	Ms. Resmi K Rajan	PTA representative
6	Ms. Divena Maria	Student, MCA
7	Mr. Vaishnav P S	Student, B Tech CSE

This committee constituted by the Principal addresses the grievances of the students.

#### j. Details of Ombudsman

The College OMBUDSMAN is appointed by Govt./University

#### k. Training and Placement

At VAS, emphasis is given to the training and placement requirements of the students. Specific training programs have been rolled out to enhance the capabilities of the students to meet the expectations of the industry. Over the years, students from the college have secured placement offers from leading IT, Non-IT, and public sector companies. The college is accredited by Tata Consultancy Services for placement activities and has tie-up with Infosys Limited through their Campus Connect programme.

#### l. General Facilities

- Well-built Auditorium of International standards with 1500 seating capacity.
- Modern Computing facilities
- State-of-the-art Laboratories for all courses
- Broadband Internet connectivity
- Well stocked library with E-journals facility in a separate Digital Library block.
- Language Lab
- Vidya Mobile App
- Expansive playground, state-of-the-art sporting infrastructure
- Comfortable and well-furnished hostel facilities for boys and girls
- Fleet of 26 buses for conveyance of students.
- Counseling Cell handled by qualified psychologist
- Modern Canteen & Cafeteria with wholesome food at affordable price
- Medical Insurance for the students
- Gymnasium & Music Club
- Medical Centre and Bank within the campus.

#### COLLEGE ADMISSION DOCUMENTS: B.Tech, B.Tech (LE), MCA &M.Tech

The following documents are to be brought by the students at the time of admission in <u>original</u> and **FOUR Photostat copies duly self-attested.** The certificate will be returned only after verification and completion of registration in KTU web portal.

	Common Documents :- MCA, B.Tech, B.Tech (LE) &M.Tech
S1.No	Details of Documents
1	SSLC/Xth Mark list
2	Birth Certificate (for CBSE/ICSE Candidates Only)
3	T.C and Course & Conduct Certificate issued by previous institution
4	Physical Fitness Certificate (for B.Tech only)
5	Photographs of students – 02 Passport size & 01 stamp size
6	Passport size photograph of parents – 01 Set (Father & Mother/Local Guardian)
7	Community and Income Certificate in original (If Applicable)
8	Final Allotment Memo & Copy of Fee Receipt (Only Govt. Merit Students)
9	Copy of Aadhar
10	Copy of Nativity certificate
Additi	onal Documents for MCA
1	+2 Mark list
2	Degree Mark list, Provisional Certificate/ Original Degree Certificate
3	Equivalency Certificate/Migration Certificate (Other State Board)
4	Admit Card & Data Sheet of MCA
Additi	onal Documents for B.Tech NRI (See college web site and download for format)
1	NRI/Sponsorship/declaration Certificate duly signed by the Embassy concerned or copy of VISA of the sponsor.
2	Relationship Certificate with the sponsor issued by the Revenue Authority or dependency certificate by the sponsor
3	Copy of Passport of the Sponsor.
	onal Documents for B.Tech (LE)
1	Diploma Mark Lists & Provisional Certificate/Original Diploma Certificate
2	Equivalency Certificate/Migration Certificate (Other State Board)
3	Admit Card & Data Sheet of Lateral Entry Test
Additi	onal Documents for BTech
1	Plus Two Mark List/12th Mark List & Pass Certificate (CBSE/ICSE Candidates Only)
2	Admit Card & Entrance Rank Data Sheet of KEAM 2023/JEE 2023.
Additi	onal Documents for M.Tech
1	B.Tech Mark List, Provisional Certificate/Original Degree Certificate
2	Equivalency Certificate/Migration Certificate (Other State Board)
3	Copy of +2 Mark list
4	GATE Score Card, Sponsorship Certificate & Previous Employment Certificate in original (If applicable)

Note:- Admission documents for all courses are subject to change based on the orders issued by the stipulated authorities.

#### m. Refund Policy

- a) Cancellation of seats will be permitted till first admission counseling of the management seats. Advance paid will be refunded after deducting processing charges. No interest will be paid on the amount (Advance payment).
- b) If any student cancel his/her admission after the date of closing of admission fixed by Govt., he/she is liable to pay liquidation damage as per the Govt.order/Court order/decision of Admission Supervisory Committee.
- c) Any changes in admission policy brought in by Govt./Court will also be applicable.
- d) In case the candidate is not fulfilling the admission criteria, his/her candidature will be automatically cancelled without any further notice.
- e) Candidate should appear for counseling for admission along with all requisite admission documents, otherwise admission will be cancelled.

	B Tech - FEE STRUCTURE :- 2023-2027														
						1st	Seme	ster							
Sl	Particulars				MG	iΤ					NRI			GOVT ME CE	GOVT
No	T articulars		ME	CS	AIML	CE	EE	EC	ME	CS	CE	EE	EC	EC EE	CS & AM
1	Co-op Society membership & regn fees	One time	51	51	51	51	51	51	51	51	51	51	51	51	51
2	ISTE	One time	300	300	300	300	300	300	300	300	300	300	300	300	300
3	Admission fees	One time	500	500	500	500	500	500	500	500	500	500	500	500	500
4	Application fee processing charges	One time	500	500	500	500	500	500	500	500	500	500	500	-	-
5	Arts & Sports Fee	Every ODD Sem	530	530	530	530	530	530	530	530	530	530	530	530	530
6	IE membership fees	One time	536	536	536	536	536	536	536	536	536	536	536	536	536
7	Insurance charges	Yearly	600	600	600	600	600	600	600	600	600	600	600	600	600
8	Uty affiliation fee	One time	750	750	750	750	750	750	750	750	750	750	750	750	750
9	PTA	Per Sem	750	750	750	750	750	750	750	750	750	750	750	750	750
10	Uty Administration fees	One time	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050

11	Uty Exam fees	Per Sem	1,995	1,995	1,995	1,995	1,995	1,995	1,995	1,995	1,995	1,995	1,995	1,995	1,995
12	Uniform Charges	One time	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100
13	College caution deposit-Refundable	One time	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
14	Tuition fees	Per Sem	47,500	49,500	49,500	40,000	40,000	47,500	60,000	87,500	55,000	55,000	60,000	25,000	25,000
15	Special fees	Per Sem	-	12,500	12,500	-	-	-	-	-	-	-	-	12,500	12,500
16	CSI Membership	One time	-	1,100	1,100	-	-	-	-	1,100	-	-	-	-	1,100
17	Refundable deposit	One time	-	50,000	50,000	-	-	-	-	1,00,000	-	-	-	-	-
Total - A			67,162	1,32,762	1,32,762	59,662	59,662	67,162	79,662	2,08,262	74,662	74,662	79,662	56,662	57,762

#### Note:-

- a) Fees are subjected to change by Government/University Orders from time to time.
- b) Candidate admitted under Government quota and belonging to SC/ST/OEC, will be eligible for stipend/Education concession as per Kerala State Government rules and prospectus for Admission to M.Tech 2023 issued by DTE
- c) Regarding the discontinuance from the course and cancellation of the admission, it shall be subject to the legal and factual scrutiny and decision of the ASC/FRC

# ROUTE MAP

