CHAITANYA BHARATI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
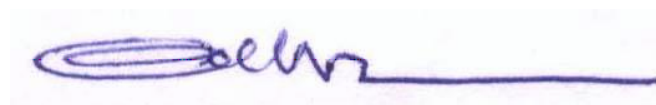## Stake holder involvement in Curriculum Development
AY 2021-22
Suggestions Received From Stake Holders

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Chaitanya Bharathi Institute of Technolog
Hyderabad-500 075

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
Stake holder involvement in Curriculum Development
AY 2021-22
Suggestions Received From Stake Holders

1) Industry

S.no	Name of the Industry expert	Company & Designation	Mobile No Mail ID	Suggestions & opinion
1.	N.Kashiviswanath	QUALCOMM Senior Staff Engineer	9535691249 nkvnath@gmail.com	About the courses 20ECE26: 5G Communication --> Include 4G communication 20ECE27: Speech Processing ---> Include Audio/Video Signal Processing 20ECE28: IoT and Its Applications --> Include Local Area Networking technologies such as Zigbee/BT/WLAN (IEEE802.11a/b/g/n/ac/ax and be, 802.11ah) and UWB. Include how the IoT devices are connected to the intelligent cloud. 20ECE29: Green Communication --> Include Low Power communication techniques
2.	Sitaram R N V	24x7 (Ex Senior Manager) HP, Bangalore	9845719381 sitaram.rnv@gmail.com	In the Speech processing I hope you are covering speech recognition using HMMs, RNNs, you can ask students to use Kaldi or HTK and build speech recognizers for Telugu, Hindi etc..

3.	A.Srilakshmi	DRDO Scientist -E	9440846029 akellasrilu@gmail.com	Projects on Multi core programming of FPGA, radar signal processing, working with Microwave circuits like circulator, direction coupler, antenna design, etc to be encouraged (areas required for industry)
4.	B.L.Penchala Rao	General manger, Air port authority of India.	9491211180 blprao@aai.aero	Navigation: a) VOR (VHF Omni Range) b) NDB c) ILS (Instrument Landing system – (Localizer+Glide Path) ~~d)~~ GNSS

1) Industry (Proofs)

HEAD
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Dr. P.Narahari Sastry Professor (CAS) <naraharisastry_ece@cbit.ac.in>

Involvement in our Curriculum Development

N.Kashiviswanath <nkvnath@gmail.com>   Sun, Jan 30, 2022 at 9:51 PM
To: "Dr. P.Narahari Sastry Professor (CAS)" <naraharisastry_ece@cbit.ac.in>

Dear Sir,

1. Suggest 'the C programming and OOPS using the C++' instead of '20ITO01: Object-Oriented Programming Using Java'.

2. About the courses
   20ECE26: 5G Communication --> Include 4G communication
   20ECE27: Speech Processing ---> Include Audio/Video Signal Processing
   20ECE28: IoT and Its Applications --> Include Local Area Networking technologies such as Zigbee/BT/WLAN (IEEE802.11a/b/g/n/ac/ax and be, 802.11ah) and UWB. Include how the IoT devices are connected to the intelligent cloud.
   20ECE29: Green Communication --> Include Low Power communication techniques

3. Please ensure
     a. that students shall develop "Real Lab" skills.
     b. that ECE students shall write overall Verilog/VHDL RTL (porting on to FPGA) and MATLAB number of
       lines of code ~2000
     c. that students hands dirty with EDA tools and embedded systems and networking hardware
     d. Hat students show working projects with one or two medium/large projects before getting the degree.

4. Please make them
     a. Easy to work within the team rather than individuals
     b. How to influence others without authority

Thanks for the opportunity.
Please let me know if you have any.

Regards,
Kashi
[Quoted text hidden]

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Dr. P.Narahari Sastry Professor (CAS) <naraharisastry_ece@cbit.ac.in>

Invovement in our Curriculum Development

Sitaram R N V <sitaram.rnv@gmail.com>   Fri, Jan 28, 2022 at 9:09 PM
To: "Dr. P.Narahari Sastry Professor (CAS)" <naraharisastry_ece@cbit.ac.in>

Dear Dr. Narahari Sastry,

I went through the curriculum.:

1) General comments: Reduce the course load in 2nd year, students are not learning subjects thoroughly as too many subjects per semester is difficult for the average student. Especially see if you can push one subject from 3rd semester to next semester or next year (it is heavy). Can you totally drop Chemistry so that you can free that slot and adjust some general subject into first year?

2) DSP could be advanced to 5th semester as elective, because image processing and video processing are offered in 5th sem, they may need DSP as prerequisite. Or move Image processing and video processing to the next semester after offering DSP in the current slot.

3) What is the syllabus of Principles of applications of AI? - this could be dropped and DSP could be kept in its place. Anyway you are offering PR and ML, which is good enough.

4) What is the syllabus for Data Analytics for Signal Processing? topics in it may have been already covered in some other subjects before.

5) In 7th semester you could introduce "Computer Vision", the syllabus could be: 1) Descriptors/Features for image recognition like SIFT, SURF, (2 weeks) 2) Multiple view geometry and homography, etc., matrices etc (4 weeks) 3) Image registration and RANSAC (1 or 2 weeks) 4) Image classification using CNNs (one week) 5) Image retrieval using visual words and/or deep learning approaches (one lecture) 6) Object detection using DNNs (one or two lectures). If you have faculty you could have a chapter on some augmented reality fundamentals or computer graphics, or some CSA faculty can teach this chapter if it is possible.

6) Machine learning using Python is taught too late, people teach now a days in 3 or 4th semester.

7) In the Speech processing I hope you are covering speech recognition using HMMs, RNNs, you can ask students to use Kaldi or HTK and build speech recognizers for Telugu, Hindi etc..

Let me know if you want to discuss.

warm regards

involvement in our curriculum development.

A Srilakshmi <srilakshmi.a@rcilab.in>   Mon, Feb 7, 2022 at 12:19 PM
To: "naraharisastry_ece@cbit.ac.in" <naraharisastry_ece@cbit.ac.in>
Cc: "akellasrilu@gmail.com" <akellasrilu@gmail.com>

Dear Sir,
I have gone through all the details furnished by you.
I would like to suggest the following changes :

1. Personality development may be included to empower students who are stepping out of campus to stand with confidence and face the taste of real life. (As I have observed, many engineering students are having very weak mentality that they cannot bear slight refusal or stress.).
There are many incidents, even in IITs, where students commit suicide being unable to handle few handful tasks. Rather they should have self confidence built up that they can do something even in adverse conditions.
If we observe the way children are grown till engineering, they only know how to prepare for exam rather than attempting to solve a problem. This is a very big gap between college and industry.

2. Basics of Biology - Does it mean/include Biological instrumentation? Biometric and biological instrumentation is

3. Gender sensitization (Sem -VII) - I think it may not be required for engineering students. The students are already grown up by now and have got good clarity of the topic.

4. History of science and technology in Sem -VIII may please be looked into. Please check if it can be replaced with any other.

5. Computer architecture and microprocessor lab is missing. The students may be taught how to setup ethernet, create routing tables, establish wifi communication, implement bluetooth and zigbee protocols to communicate with analog and digital sensors. Establish TCP-IP or UDP protocols.

5. Software engineering concepts should be introduced.

6. Projects on Multi core programming of FPGA, radar signal processing, working with Microwave circuits like circulator, direction coupler, antenna design, etc to be encouraged (areas required for industry)

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Involvement in our curriculum development.

B.L.Penchala Rao <blprao@aai.aero>   Mon, Feb 7, 2022 at 11:05 AM
To: "Dr. P.Narahari Sastry Professor (CAS)" <naraharisastry_ece@cbit.ac.in>

Dear sastry,

I would like to suggest the following topics that may be considered for inclusion in your syllabi which pertains to the use of electronics and communication in aviation industry.

The following components i.e Communication Navigation and Surveillance are vital in providing Air traffic services to aircraft.

Communication:

1. VHF Communication
2. HF Communication
3. Data Communication (CPDLC-Controller Pilot Data link Communication)

Navigation:

1. VOR (VHF Omni Range)
2. NDB
3. ILS (Instrument Landing system – (Localizer+Glide Path)
4. GNSS

Surveillance:

1. RADAR (Primary and Secondary)
2. ADS-B
3. MLAT (Multilateration)
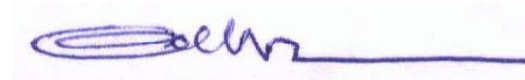4. ASMGCS (Advanced surface movement guidance and control system)

Apart from this emerging trends in aviation also may be added

Hope these inputs may be of some help to you

2). Alumni

S.No	Name of the Alumni	E mail Id & Ph#	Batch	Present occupation	Suggestions
1.	Chennakeshavulu Reddymalla	keshavreddymalla@gmail.com, 8008435582	1997-2001	Associate professor, JBIT	Artificial Intelligence (AI)
2.	DLN Raju	rajudln4@gmail.com 8978219990	1997-2001	SW Engineering Manager ZF TCI	Behavioral courses which helps in training or developing ethics, self-learning, increases responsibilities, pro-activeness
3.	Vaishnavi Suthram	vaishusri98@gmail.com 9493327250	2016-2020	BusinessAnalyst, Deloitte US - India	From sem 6: It would be nice to have Fundamentals of DBMS and Python programming in different electives

2). Alumni (proof)

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Dr.K.Suman Assistant Professor <ksuman_ece@cbit.ac.in>

Re: Alumni involvement in Curriculum development

Chennakeshavulu Reddymalla <keshavreddymalla@gmail.com>   Thu, Feb 3, 2022 at 9:36 AM
To: "Dr.K.Suman Assistant Professor" <ksuman_ece@cbit.ac.in>

Good evening sir/madam
I referred the R 20 BE(ECE) syllabus of V to VIII semester's. I have went through your syllabus and was quite Astonished by your in depth knowledge and well balanced semester's and by observing currently trends in industry I have few suggestions such as

1.Artificial Neural Networks (ANN)

2.Natural Language Processing (NLP)

3.Artificial Intelligence (AI)

4.Data Analytics using R

Better to include depth knowledge of such subjects will lead to increased exposure of student in the industry

Thanking you for giving this opportunity to me

R. Chennakeshavulu ,
Associate professor,
JBIT

On Tue, 25 Jan, 2022, 11:09 am Dr.K.Suman Assistant Professor, <ksuman_ece@cbit.ac.in> wrote:

Sir,
The department of ECE is going to conduct a BoS meeting for V-VIII semesters of R-20 curriculum. For this, we require your valuable suggestions on the course structure of these semesters. Could you please suggest changes in the course structure or perhaps include any new course in the curriculum.
I have attached the course structure with credits for R 20 syllabus from I-IV semesters and also syllabus of V-VIII semesters for your reference.
Thank you
Regards
--

Dr K Suman
Assistant Professor
Dept. of ECE
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-500075
9490023344, ksuman_ece@cbit.ac.in

C.B.I.T

D-MAIL & WEB SERVICES

Dr.K.Suman Assistant Professor <ksuman_ece@cbit.ac.in>

Re: Alumni involvement in Curriculum development

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dln raju <rajudln4@gmail.com>   Sun, Feb 6, 2022 at 9:47 PM
To: "Dr.K.Suman Assistant Professor" <ksuman_ece@cbit.ac.in>
Cc: chandrakiran.kasula@gmail.com

Hello Suman,

Please find few comments with respect to the courses and also some instructions for the same:

- Instead of English – make it to develop – Communication skills (more practical's)
- Employability Skills – instead also develop entrepreneurship.
- Chemistry – not at all required for a graduate on ECE
- A separate course may not be required for "Engineering Economics and Accountancy ", you can combine with all such courses.
- Why 3 semesters have Maths (Calculus, Vector Calculus and Differential Equations, Applied Mathematics) ", you can combine with all such courses.
- Workshop/Manufacturing Practice, Computer Aided Design & Drafting, Engineering Mechanics-I – not at all required for a graduate on ECE – or combine all such into ONE.
- Basics of Data Structures – not basics, more expertise is required.
- Reduce courses and increase practical's, projects, self-learning, internships
- Behavioral courses which helps in training or developing ethics, self-learning, increases responsibilities, pro-activeness

Best Regards,

DLN Raju

On Tue, Jan 25, 2022, 11:16 Dr.K.Suman Assistant Professor <ksuman_ece@cbit.ac.in> wrote:

Dear Kiran,
The department of ECE is going to conduct a BoS meeting for V-VIII semesters of R-20 curriculum. For this, we require your valuable suggestions on the course structure of these semesters. Could you please suggest changes in the course structure or perhaps include any new course in the curriculum.
I have attached the course structure with credits for R 20 syllabus from I-IV semesters and also syllabus of V-VIII semesters for your reference.
Thank you
Regards
–

Dr K Suman
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9190023344, ksuman_ece@cbit.ac.in

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Dr.K.Suman Assistant Professor <ksuman_ece@cbit.ac.in>

Re: Alumni involvement in Curriculum development

vaishusri98@gmail.com <vaishusri98@gmail.com>   Sun, Feb 6, 2022 at 9:16 PM
To: "Dr.K.Suman Assistant Professor" <ksuman_ece@cbit.ac.in>

Hello Ma'am,

I see one change in open electives structure that can be very helpful.
From sem 6: It would be nice to have Fundamentals of DBMS and Python programming in different electives.
Open elective 1 can include **Python** and open elective 2 can include **Python with ML**. Fundamentals of DBMS course can come in the Open electives 3 list.
The reason being, having programming earlier in the course helps students explore better for their final year projects. Incorporating programming into ECE based projects can be extremely helpful. It can also help them work on research papers.

I had python programming in my 6th semester and it really helped me work on two research papers which greatly helps me now.

Thank you,
Vaishnavi Suthram

On 07-Feb-2022, at 09:52, Dr.K.Suman Assistant Professor <ksuman_ece@cbit.ac.in> wrote:

--------- Forwarded message ---------
From: **Dr.K.Suman Assistant Professor** <ksuman_ece@cbit.ac.in>
Date: Mon, Jan 24, 2022 at 9:38 PM
Subject: Alumni involvement in Curriculum development
To: <keshavreddymalla@gmail.com>

Sir,
The department of ECE is going to conduct a BoS meeting for V-VIII semesters of R-20 curriculum. For this, we require your valuable suggestions on the course structure of these semesters. Could you please suggest changes in the course structure or perhaps include any new course in the curriculum.
I have attached the course structure with credits for R 20 syllabus from I-IV semesters and also syllabus of V-VIII semesters for your reference.
Thank you
Regards
--

Dr K Suman
Assistant Professor
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9490023344, ksuman_ece@cbit.ac.in

<R 20 BE (ECE) V to VIII Semesters (1).docx>
<Course Structure and distribution of Credits for BE(ECE).docx>
<R 20 BE (ECE) I to IV Semesters.docx>

3). Parent

S.no	Name Of the Parent	Name of the student	Batch	Mobile No Mail ID	Present parent occupation	Suggestions &opinion
1.	Sri. K. Pramod Kumar Reddy	Ms.K.Adithi Reddy	AY 2018-19 Passed out	9866724446 kallempramod@gmail.com	Delivery Head, Cyber Security, APMEA Region, Wipro Technologies Ltd. Hyderabad. 500081	I understand that it might require a few administrative changes, but if it is feasible, it would prove to be a great opportunity for students to explore various verticals and find their niche.
2.	Sri M V P Rajasekhar	M.V.P Bharadwaj VI sem E3 Student	AY 2019-20 Admitted	9849599321 rajasekharmvp@gmail.com	Manager new initiatives, Linkwell Telesystems pvt. Limited	Inclusion of topics like basics of biometric authentication and facial recognition in line with UIDAI and banking services

3). Parent (Proof)

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Dr.A.Vani Associate Professor (Adhoc) <avani_ece@cbit.ac.in>

Parent feedback to frame the Syllabus from V to VIII Semester(UG)
3 messages

Dr.A.Vani Associate Professor (Adhoc) <avani_ece@cbit.ac.in>   Mon, Jan 24, 2022 at 1:34 PM
To: kallempramod@gmail.com

Good Afternoon sir
Sir, we are (BoS) framing the syllabus for V-VIII semester(UG).In this regard, we are involving stakeholders(Parents) to give suggestions and comments or any feedback ..Your suggestions and comments will be analyzed with BoS and concerned Course expert Group and will be included in the syllabus. For this, We have attached Course Structure and distribution of Credits and V to VIII semesters Structure. And also I to IV semesters Course structure attached for reference.
Sir, Please suggest any new topics(content) that are to be included in each course.
Sir please do the needful on before 29-01-2022
Thank you very much.

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3 attachments

📄 **Course Structure and distribution of Credits for BE(ECE).docx**
34K

📄 **R 20 BE (ECE) I to IV Semesters.docx**
220K

📄 **R 20 BE (ECE) V to VIII Semesters.docx**
240K

Pramod Reddy <kallempramod@gmail.com>   Wed, Feb 2, 2022 at 12:17 PM
To: "Dr.A.Vani Associate Professor (Adhoc)" <avani_ece@cbit.ac.in>

Greetings,

Hope this email finds you well.

I was occupied with multiple activities and hence delay.

In my opinion, the curriculum is quite good. In particular I found the electives ranging from cybersecurity to history of technology very impressive.
However, I believe it would be great if students were given a chance to sign up for a course offered by other branches for an elective. I understand that it might require a few administrative changes, but if it is feasible, it would prove to be a great opportunity for students to explore various verticals and find their niche.

Hope you find the feedback useful,

Regards,

Pramod Reddy
[Quoted text hidden]

Dr.A.Vani Associate Professor (Adhoc) <avani_ece@cbit.ac.in>   Wed, Feb 2, 2022 at 7:03 PM
To: Pramod Reddy <kallempramod@gmail.com>

Thank you very much sir
[Quoted text hidden]

C.B.I.T
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Dr.A.Vani Associate Professor (Adhoc) <avani_ece@cbit.ac.in>

Parent feedback to frame the Syllabus from V to VIII Semester(UG)
4 messages

Dr.A.Vani Associate Professor (Adhoc) <avani_ece@cbit.ac.in>   Mon, Jan 24, 2022 at 1:35 PM
To: rajasekharmvp@gmail.com

Good Afternoon sir

Sir, we are (BoS) framing the syllabus for V-VIII semester(UG).In this regard, we are involving stakeholders(Parents) to give suggestions and comments or any feedback ..Your suggestions and comments will be analyzed with BoS and concerned Course expert Group and will be included in the syllabus. For this, We have attached Course Structure and distribution of Credits and V to VIII semesters Structure. And also I to IV semesters Course structure attached for reference.

Sir, Please suggest any new topics(content) that are to be included in each course.

Sir please do the needful on before 29-01-2022

Thank you very much.

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3 attachments

📄 **Course Structure and distribution of Credits for BE(ECE).docx**
34K

📄 **R 20 BE (ECE) I to IV Semesters.docx**
226K

📄 **R 20 BE (ECE) V to VIII Semesters.docx**
240K

Rajasekhar M V P <rajasekharmvp@gmail.com>   Thu, Feb 3, 2022 at 8:40 PM
To: "Dr.A.Vani Associate Professor (Adhoc)" <avani_ece@cbit.ac.in>

Respected madam,
           Apologies for the late response.
Here are my suggestions :
1.) In 6th semester ,I observed that Cryptography and Block chain technology was part of professional elective which contained other core subjects.So I would suggest to shift that cryptography to open elective so that student can opt for this technology and can learn a core subject like FPGA ,etc.
2.)Inclusion of topics like basics of biometric authentication and facial recognition in line with UIDAI and banking services
3.)Increase industry interactions with core companies like micron,Qualcomm .It came to my notice that Micron technologies does not have CBIT in its list for offering internships.
4.)Not only for the upcoming batches, even for the current batch I would suggest an increase in the industry interactions and provide more opportunities in the field of ECE for both placements, internships and guided projects .
Regards,
Rajasekhar

[Quoted text hidden]

Dr.A.Vani Associate Professor (Adhoc) <avani_ece@cbit.ac.in>   Thu, Feb 3, 2022 at 8:58 PM
To: Rajasekhar M V P <rajasekharmvp@gmail.com>

Thank you very much sir for your kind cooperation and valuable suggestions
[Quoted text hidden]

Dr.A.Vani Associate Professor (Adhoc) <avani_ece@cbit.ac.in>   Thu, Feb 3, 2022 at 9:01 PM
To: Rajasekhar M V P <rajasekharmvp@gmail.com>

No sir, we have to say apology because we have given short time and we are very much thankful for your response.

4) Professional Societies

S.no	Name of the Professional	Professional Society /Body	Position in Society/Body	Suggestions
1.	Er. Nuli Namassivaya	FIETE	Honorary Secretary	More Industry interaction subjects are required in your curriculum.
2.	Dr.D.M.K.Chaitanya	FIETE	Associate Professor, VCE, ECE Department.	Internship-I is good as it includes MOOCs, but Internship-II students may go with Theme based projects useful to society.

4) Professional Societies (Proof)

HEAD
DEPARTMENT OF ECE
Chaitanya Bharathi Institute of Technolog
Hyderabad-500 075

Sub: Requesting opinions from the stakeholders for syllabi of BE V to VIII semester -Reg

Nuli Namassivaya <nnamassivaya@gmail.com>   Sat, Jan 29, 2022 at 3:56 PM
To: T Sridher <tsridhar_ece@cbit.ac.in>

Sir,
Thank you for approaching us with suggestions for improving your new R-20 curriculum structure.

These are my suggestions :

1. More Industry interaction subjects are required in your curriculum.
2. Make Software Defined Radio and Machine Learning subjects as core subjects instead of program electives.
3. IoT and its Applications are made as a single credit course and in the same semester create a lab for the course.
4. Also try to attach a Lab course for all the subjects possible.

These are suggestions from my side.

Thank you

Regards,
 Er. Nuli Namassivaya
 Honorary Secretary
IETE, Hyderabad

Er. Nuli Namassivaya

Connect : in f ⊙ ☻

On Fri, Jan 28, 2022 at 2:32 PM T Sridher <tsridhar_ece@cbit.ac.in> wrote:
[Quoted text hidden]

Sir, CBIT - Hyderabad - Requesting opinions from the stakeholders for syllabi of BE V to VIII semester -Reg

Chaitanya Dmk <chaitanyadmk@gmail.com>   Sat, Jan 29, 2022 at 9:44 PM
To: T Sridher <tsridhar_ece@cbit.ac.in>

Dear Sir,

Seasons Greetings! Thank you very much for your mail.

I have gone through the detailed curriculum sent by you and it is well framed and the courses are nicely structured in the respective semesters. I would like to give my opinions in this regard.
1. The vision and mission statements are well defined.
2. English course can be there in I semester.
3.Electromagnetic Theory and Quantum mechanics are clubbed together, course syllabus may be hectic to learn in II semester.
4.Antennas and Wave Propagation course is not included in the syllabus.
5. Microwave and Radar Engineering course syllabus may only touch the basics. Instead of that course you may include Radar and Satellite Engineering separately if possible.
6.Internship-I is good as it includes MOOCs, but Internship-II students may go with Theme based project useful to the society.

These are some observations from my side and necessary modifications can be done at your end if you feel the feedback is genuine

Thank you very much for giving me this opportunity.

Best Regards
Dr.D.M.K.Chaitanya
Associate Professor,
VCE,ECE Department.
[Quoted text hidden]
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Best Regards
Dr.D.M.K.CHAITANYA